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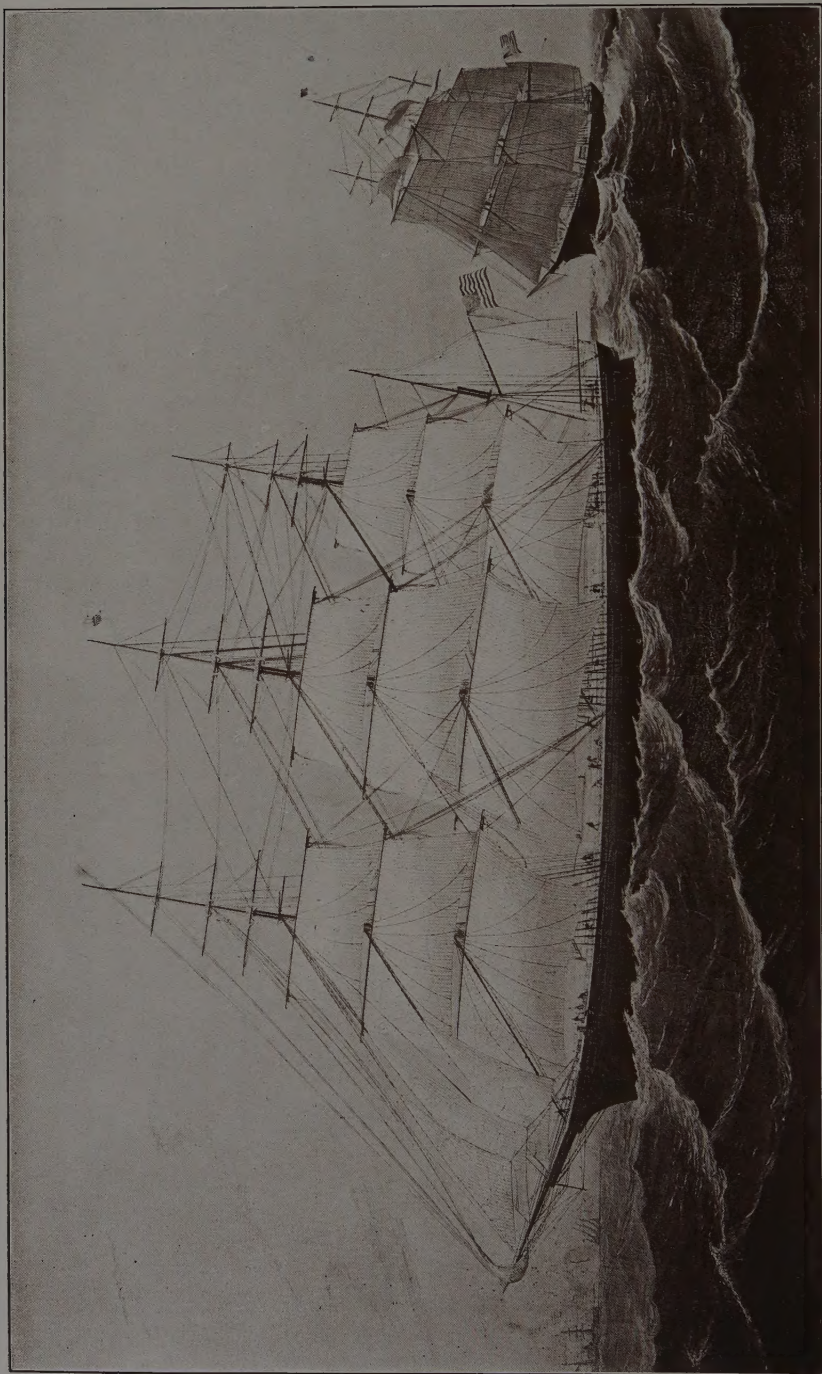
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THE SAILING SHIPS
of NEW ENGLAND

Series Two



[399] CLIPPER SHIP "GREAT REPUBLIC" OF NEW YORK, 4555 TONS, BUILT AT EAST BOSTON IN 1853
BY DONALD MCKAY. THE LARGEST CLIPPER SHIP EVER BUILT
From an oil painting in possession of Nichols L. McKay

THE
SAILING SHIPS
OF
NEW ENGLAND

Series Two

By

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AND

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OF NEW ENGLAND ANTIQUITIES



MARINE RESEARCH SOCIETY
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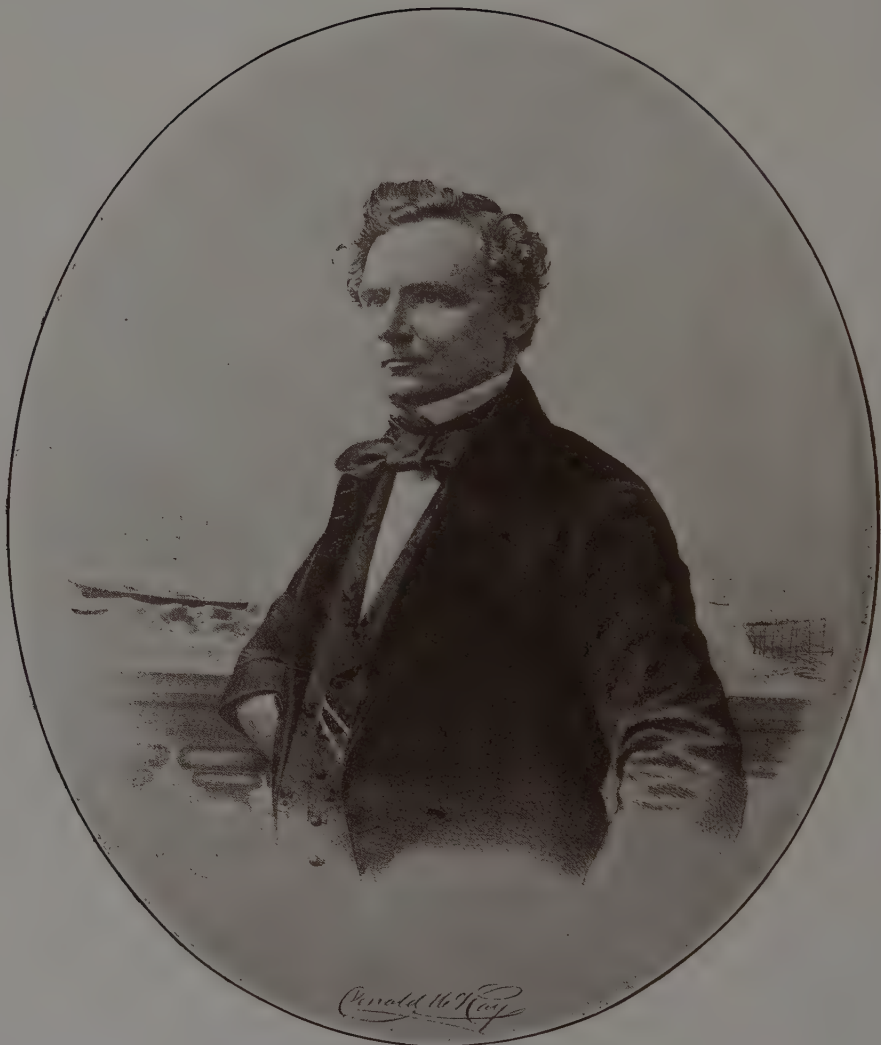
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PREFACE

THE first Publication of this Society, *The Sailing Ships of New England*, went out of print immediately upon publication and a constantly growing interest in pictorial representations of the old-time sailing ship has led to the collection of other similar material which is now published as a SECOND SERIES of the earlier volume. Many of the illustrations are from photographs made especially for use at this time and thanks are especially due to the Peabody Museum of Salem, Mr. Charles H. Taylor, Jr. of Boston, Mr. Nichols L. McKay of Arlington and Mr. George E. Noyes of Newburyport. In view of the present-day interest in the fast-sailing clipper ship it has seemed fitting to include a generous representation of these beautiful examples of the skill of the New England shipbuilder and as a natural prelude the Introduction is entirely devoted to a biographical account of Donald McKay, who built the most famous of them all. Much of the information embodied in this Introduction has been placed at our disposal by his son, Mr. Nichols L. McKay, and Mr. Richard C. McKay of New York City, a grandson of the shipbuilder, has kindly revised the manuscript and supplied additional information. To their friendly interest the Society is greatly indebted.

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DONALD McKAY

From a lithograph after a drawing by L. Grozilier

INTRODUCTION

DONALD MCKAY, THE BUILDER OF CLIPPER SHIPS

AT the close of the War of 1812 there came a demand for lines of packet ships carrying both passengers and freight and clearing regularly on certain days in each month. The ships engaged in the packet service were built for strength as well as speed although beauty of model and comfort in the passenger accommodations of course were not overlooked and as the American packets carried the best officers and the largest crews and were fast, dry, well fitted and well managed they soon obtained control of the passenger, mail and express carrying trade to Europe. The rivalry between the various packet lines was keen, however, and in consequence there were insistent appeals to the shipbuilders for improvements in hull and sailing qualities. These were met by a more scientific study of the lines of the hull and the sparring of ships which in time brought into existence a type of two- and three-decked vessels of 800 to 1,400 tons registry having the lower water-lines at the bow and stern concave while at the plank-sheer and rail the bow was almost round. These ships had great carrying capacity and made the run across the Atlantic in excellent time, usually making the outward passage in from eighteen to twenty-one days and the homeward passage from Liverpool in thirty to thirty-five days.

About the year 1840 increased demands were made of the shipbuilders to produce a more speedy type of vessel intended primarily for cargo carrying. The tea trade with

China required the quickest possible passages as the cargoes of teas, spices and dried fruits would deteriorate during a long voyage and the uncertainties of the markets also gave the greatest advantage to the ship first making the home port. The new crop of tea always brought the best price. Under this demand there was developed a type of vessel that set low in the water, with very sharp, high bow, broad of beam and with long, easy water-lines. The masts were tall and raking and the yards were so long that the ship could spread an enormous cloud of canvas. This type of vessel was a development from the long, low, flush-decked schooners and brigs built at Baltimore and along the Chesapeake which had their inception in the French vessels that came over during the Revolutionary War. During the War of 1812 these Baltimore "clippers," as they were called, obtained a great reputation for speed and many of them became privateers and slavers and some ranged the West Indies flying at the peak the black flag with the skull and cross-bones.

The characteristic feature of the Baltimore clipper was the lengthened, curving bow and using this as a basis for certain proposed improvements, John W. Griffiths, a marine architect of New York, constructed a model in 1841 embodying his ideas. This was publicly exhibited and later he delivered a number of lectures on shipbuilding which aroused much discussion and more or less opposition, as is usual with anything in the nature of innovation. Mr. Griffiths continued to advocate his idea of lengthening the bow above the water-line and drawing out and sharpening the body of the hull and in 1843 Howland & Aspinwall commissioned Smith & Dimon of New York to embody Griffiths's proposed improvements in a ship of seven hundred and fifty tons, to be called the *Rainbow*. When she was

launched one critical observer declared that her bow had been "turned inside out," and that her whole form was contrary to the laws of nature.* Her critics were shortly put to confusion for on her second voyage she made the passage from New York to Canton and back in six months and fourteen days which included two weeks in port discharging and loading cargo. Her captain swore that she was the fastest ship in the world, which was undoubtedly true, and that no ship could be built to beat her. Other sharp ships soon followed, — the *Howqua*, the *Sea Witch*, the *Samuel Russell*, and others. Every year new vessels were launched spreading more and more canvas and with increasing tonnage.

The discovery of gold in California gave a tremendous impetus to the building of fast ships. In the year 1849 nearly one hundred thousand passengers arrived at San Francisco and such was the rush that a hundred and fifty vessels of all rigs and all sizes were some times at anchor in the Bay. The run from New York or Boston was usually made in one hundred and twenty to one hundred and fifty days but when the tea ships began to arrive in one hundred days from New York, the demand became insistent for quicker passages and the rush began in the shipyards. In New York, the principal builders were Smith & Dimon, William H. Webb, Jacob Bell, and Jacob A. Westervelt; at Portsmouth, N. H., was located the yard of George Raynes; at Newburyport were the Curriers and George W. Jackman; at Medford, J. O. Curtis and Isaac Taylor; at South Boston, Briggs Brothers; and at East Boston were Samuel Hall, R. E. Jackson, Paul Curtis, and Donald McKay, who was destined to become the most famous of them all. Between 1850 and 1853 over one hundred and fifty splendid clippers were built in these shipyards including

*Clark, *The Clipper Ship Era*, p. 66.

"the swiftest sailing vessels the world has ever seen or is likely ever to see"* and sixteen of the finest and swiftest were built at East Boston by Donald McKay.

Donald McKay, the famous builder of clipper ships, came from a virile line of Scotchmen who traced their descent from Donald McKay, a Highland chieftain, who died at Tain, County Ross, in 1395. Donald McKay, the grandfather of the shipbuilder, was a British army officer who settled at Shelburne, Nova Scotia, at the close of the Revolution, at the time when large numbers of American loyalists selected this splendid harbor and located there in hope of founding a great port. Within a year the small fishing hamlet became a city of twelve thousand inhabitants and measures were taken to transfer the seat of government from Halifax. It was here that Captain McKay with other Scotch emigrants was left stranded when the mushroom city dwindled into insignificance almost as rapidly as it had risen, for it had no back-country to supply and the American loyalists, who came from the official and merchant class, would not engage in the fisheries — almost the only industry that could then be successfully carried on. The money they had brought from their old homes was soon exhausted and the population sank to about four hundred.

Hugh McKay, the father of the shipbuilder, was the eldest son of the British officer and was born at Shelburne, May 12, 1788. He was a farmer and fisherman; a man of great physical strength and commanding presence, being about six feet, four inches tall and well proportioned. He married and had a family of eighteen children who one by one, as soon as old enough, left home and came to the United States looking for larger opportunity and fortune.

Donald McKay, the second child, was born September 4,

*Clark, *The Clipper Ship Era*, p. 105.

1810. There was some building of schooners and small shipping at Shelburne and as he grew up he found employment in a local shipyard where he learned to use the adz and broadax. He was the first to break away from home and when only sixteen shipped on a coaster bound for New York and soon found employment as a day laborer in Isaac Webb's shipyard. He learned his trade in the yard of Brown & Bell, where he worked on some of the famous packet-ships built by that firm—the *Emerald*, *Shakespeare*, and *Garrick*. Old Mr. Bell became interested in the young man and recognizing his ability eventually recommended him for a position in the Brooklyn Navy Yard where he was placed in charge of a large number of workmen. At that time political feeling ran high and there was a strong Native American Party organization among the mechanics in the yard and because McKay was not born under "the Stars and Stripes" he was soon bullied out of the yard. But Mr. Bell was still his friend and McKay was soon on his way to Wiscasset, Maine, to superintend the finishing of a vessel being built for New York owners. He found the Maine shipwrights there far behind the New York builders in their methods of construction and a restless ambition soon led him to plot out in his mind a yard of his own where speedy vessels might be built after improved designs of his own fashioning.

When the job at Wiscasset was completed McKay came down the coast as far as Newburyport, then and afterwards a considerable center for shipbuilding. Here he found employment with John Currier, Jr., and superintended the building of the ship *Huntress*, of 547 tons burden, owned by N. Putnam and others of New York. She was launched in the fall of 1839.

Newburyport at that time was the smallest town in the

Commonwealth, as to area, and the shipyards were actually within the limits of Newbury, along the southern bank of the Merrimac between it and the highway leading to "the Chain Bridge" and Amesbury. Sandwiched between numerous blacksmith shops and machine shops were the yards of the Curriers and the Jackmans where shipping of all kinds might be seen in various degrees of progress of construction with sometimes a steamboat on the stocks.

Mr. Currier was so pleased with the ability and energy of his young foreman that he asked him to sign a contract to remain with him for a term of five years but McKay declined to accept for he didn't propose to remain a foreman all his days and his dreams of accomplishment came true, for five years later, in 1845, he had his own yard in East Boston and was building the packet ship *Washington Irving* for Enoch Train's Boston - Liverpool Line. However, McKay soon brought his family to Newbury and several of his children were born there.

In 1840, John Currier built for Dennis Condry and other New York owners, the ship *Delia Walker*, of 472 tons, and McKay was in charge of the construction. From time to time Mr. Condry came to Newbury to watch the progress of the work on his ship and soon became greatly impressed with the superior mechanical ability of the young shipwright in charge of the job and also with the amount of work that he was able to get out of his men so that several years later, when opportunity arose, he was able to say a good word for McKay and thereby bring about a turn in his career that led on to fame and business success.

McKay remained with John Currier until 1841 when William Currier of Newbury offered him a partnership and under the firm name of Currier & McKay he began his real career as a shipbuilder. William Currier had previously

been associated with Elisha Briggs, another well-known shipbuilder whose yard was located at the foot of Pillsbury's lane, now Ashland street, Newburyport, and in this shipyard McKay built the bark *Mary Broughton*, of 323 tons, which was launched in 1841, and the next year, the ship *Courier*, of only 380 tons. She was built on order for New York owners to sail in the coffee trade between New York and Rio Janeiro and it was believed at the time that such vessels as were demanded by the competition of that trade could not be built outside of New York or Baltimore. But the *Courier* proved to be a wonderfully speedy craft when placed in competition with the finest vessels in the trade and as quick passages meant increased profits her builder was at once brought prominently before the shipping interests. Currier & McKay also built in 1842 the ship *Ashburton*, of 449 tons, for C. Hill and William Plummer of Boston. The partnership between William Currier and Donald McKay was short-lived and was dissolved within a year, the models and moulds being equally divided — with a saw.

In 1843, McKay formed a partnership with William Pickett of Newburyport under the firm name of McKay & Pickett, and the new firm took over a yard on Moggaridge's Point and soon laid the keel of the packet ship *St. George*, of 845 tons register, which was launched the same year. She was built for New York owners. The next year were launched the ships *John R. Skiddy*, 980 tons, built for Francis Skiddy and others, and the packet ship *Joshua Bates*, 620 tons, built for Enoch Train of Boston, — the first ship expressly built for the famous Train Line of Boston and Liverpool packets.

It was Col. Enoch Train of Boston who gave McKay his opportunity and supplied the backing and the business that led up to the building of the famous clipper ships in the Mc-

Kay yard at East Boston. Train had been brought up in the hide and leather business carried on by his uncle, Samuel Train, and when he went into shipping on his own account he engaged principally in the importation of hides from South America and Russia. His success induced him to establish a line of packet ships to ply between Boston and Liverpool. On crossing the Atlantic for the purpose of arranging for agencies in Europe, he met in the chapel at Windsor Castle, one August morning,* Dennis Condry of New York, the owner of the ship *Delia Walker* which had been built at Newburyport under the superintendence of Donald McKay. Mr. Train soon found himself discussing with Mr. Condry the projected packet line and also what shipbuilders were best equipped to produce the type of ships that he had in mind for his line. The New York yards were building fine ships but he wanted to have his new ships built in Boston, if possible, or at least in New England. Mr. Condry related his own experiences while at Newburyport when the *Delia Walker* was being built and strongly advised Mr. Train to go to the young shipwright who then had his own yard on the banks of the Merrimac, and his views were expressed so convincingly that Mr. Train at length promised to see McKay before contracting for his first ship. Soon after reaching Boston he went to Newburyport and so swiftly did he reach a decision that within an hour after meeting Donald McKay a contract was signed for building the *Joshua Bates*, the first of the famous Train Line, at one time the pride of New England.

Enoch Train in time became one of the largest ship-owners of Boston and some thirty of his vessels sailed regularly between Boston and Liverpool. The Train Line offices at first were at 39 Lewis Wharf where the ships had their berth

**The (Boston) Atlas*, July 30, 1855.



SHIP "WASHINGTON IRVING." 751 TONS, BUILT AT EAST BOSTON IN 1845 FOR TRAIN'S BOSTON-LIVERPOOL PACKET LINE

From a drawing by Donald McKay at the Peabody Museum, Salem

for loading and discharging. In 1846, two years after the organization of the line, the Irish famine gave great impetus to emigration and the packet business increased rapidly. Most of the fine ships of the Train Line were built by Donald McKay. In 1855, Mr. Train projected the Boston & European Steamship Company and associated with him was Donald McKay as one of the incorporators. The new company planned to build and maintain a line of steamers to compete with the Collins Line sailing from New York, but the panic of 1857 made it impossible to finance the project. It was at this time that Enoch Train & Co. failed and their business was taken over by Thayer & Warren. The Warren Line of the present time still flies the old Train private signal — a red flag with a white diamond — that formerly was hoisted on the signal halliards of the *Joshua Bates*, *Washington Irving*, *Staffordshire*, *Chariot of Fame* and other fine ships built by Donald McKay.

When the *Joshua Bates* was launched at Newbury, Mr. Train was so pleased with the lines of his new ship and with the skill of her builder that he said to McKay, "You must come to Boston; we need you and if you wish for financial assistance to establish a shipyard, let me know the amount and you shall have it." It was enough! The dream of the young shipbuilder was coming true. So the pleasant and profitable partnership with William Pickett was dissolved and at the age of thirty-four McKay established his new yard at the foot of Border Street in East Boston. He took his family to a house in Princeton Street, but the next year he built a house on White Street where he lived surrounded by fruit orchards until he gave up shipbuilding and removed into the country. One of the pleasant features of his life in East Boston was the fact that he gathered about him other members of his family. His father and mother came

there to live and die. His brother Lauchlan, who so successfully commanded the *Sovereign of the Seas*, lived in East Boston for many years. Hugh, David and John, other brothers, lived there and engaged in shipbuilding and Nathaniel, the youngest brother, became a boilermaker and founded the well-known Atlantic Works.

The first ship built by McKay in his new shipyard was the *Washington Irving*, of 751 tons, launched in 1845 and flying the Train signal. She was one hundred and fifty feet, ten inches, in length, thirty-three feet in breadth and had a depth of twenty-one feet. The next year were launched the *Anglo-Saxon*, 895 tons, and the *New World*, 1,404 tons. These were fine ships and were finished, fitted and decorated in the most up-to-date manner. The *Anglo-Saxon* was 162 feet, 3 inches long over all, and her mainmast was 79 feet, long and raked $1\frac{1}{4}$ inches to the foot. "Her bow in proportion to her size, is as sharp and dashy as that of a well-modeled pilot boat, but still has not the flatted appearance of having been cut away like a wedge but rounds truly and gracefully on its horizontal sweep; and as it rises from the water its inclination forward terminates in a light and easy flare, which springs outward from the line of the plank shear."*

A figure of an Anglo-Saxon monarch of the Middle ages, crowned and equipped for the field, ornamented the bow of the ship. It was painted white and relieved by gilding. The trail boards were ornamented with carved work, representing shields, bows, arrows, spears, battle axes and oak branches, on a white ground set off with gilding. The hawse holes were surrounded with carved wreaths and at the end of each cathead there was a lion rampant, carved and gilded. Over the first tier of stern windows was an arch of

**Boston Post*, September 2, 1846.

carved and gilded work in the center of which appeared the American and British shields, guarded by an eagle and a lion and surmounted by an unfurled flag and a Liberty pole and cap. On the starboard side was an Irish warrior on horseback, bearing aloft a spear, and on the port side, an English chieftain, mounted, wearing mail and brandishing his sword. All this carved work was done by J. W. Mason. The hull was painted black with a white line containing a tier of black ports.

As the ship was primarily designed for carrying passengers, the cabins were fitted up in the most luxurious manner known at the time. The great cabin was thirty feet long and thirteen feet wide exclusive of eight staterooms, each six and one-half feet long by eight feet wide. Its walls were wainscoted with single panels of polished branch mahogany relieved by white pilasters and it was lighted by a large skylight. The ladies' cabin was thirteen feet square and had four staterooms and "a bathing apartment." This cabin was in the stern and in addition to the six stern windows it had a skylight and it too was finished in mahogany. In it the transom was "splendidly fitted up as a sofa, so soft and cosy that the Commander of the Faithful, if reposing upon it, might fancy himself already in the regions of Mahomet's paradise." The cabin floors were carpeted and amidships of each there was a mahogany table and chairs with reversible backs, as in railroad cars. The cabins were heated by Stanley's patent stoves. Each stateroom had two berths and a sofa with drawers beneath, a wash stand and a writing desk, and all were lighted by a deck light and a side light with a pivot lamp for night use. There was a second class cabin, the finish grained in oak color, with eleven staterooms. The quarters for steerage passengers were forward between decks, and accommodated ninety-six berths.

During the year 1847, McKay launched three ships, — the *Ocean Monarch*, 1,301 tons, and the *Anglo-American*, 704 tons, for the Train Line, and the *A. Z.*, 675 tons, for account of Zerega & Co.* of New York. These were followed the next year by the *Jenny Lind*, 533 tons, and the *L. Z.*, 897 tons. In 1849, he built four vessels including two more ships for Enoch Train.

Because the well-known New York shipping firm of Grinnell, Minturn & Co., was favorably impressed with the ship *New World*, the year 1850 saw Donald McKay constructing the popular New York-Liverpool packet *Cornelius Grinnell*, 1,118 tons, a vessel that remained in the Atlantic trade for many years. This year also witnessed the launching of Enoch Train's celebrated *Daniel Webster*, and the oration upon that occasion was delivered by the "Immortal Daniel" to an immense crowd at McKay's shipyard. In the midst of his speech, the cry of "Man overboard!" was heard and nearly everyone ran to the water's edge when it was discovered that the rescued one — rudely handled with boathooks, pikepoles, etc. — was none other than Enoch Train. Daniel Webster finished his oration abruptly and joined the sympathetic crowd around Boston's leading shipowner.

The brilliant era of the clipper ships had begun while that of the packets was in its declension. It was the growing demands of the China and India trade that instituted this era and the discovery of gold in California and Australia that developed it. The discovery of California's golden sands did more in four years (1849 to 1853) toward improvement in the style of shipbuilding along the Atlantic Coast than perhaps would have occurred from other general

*Mr. Zerega was a well-known merchant and looked upon as an oddity in the business world because he kept no books and would not have anything put on paper in any business transaction.

causes in half a century. With the great demand for fast ships the growing reputation of McKay brought an order for the *Stag-Hound*, to load for San Francisco and thence to China. She measured 1,534 tons and at the time of her launching she was not only the largest merchant ship ever built, "but her model may be said to be the original of a new idea in naval architecture. She is longer and sharper than any other vessel of the merchant service in the world. . . . Every element in her has been made subservient to speed and in designing her, her builder was not interfered with by her owners. He alone, therefore, is responsible for her sailing qualities."*

This was in accordance with the requirements of her owners, Messrs. George B. Upton and Sampson & Tappan of Boston. At the time the contract was placed with Donald McKay, they stipulated that she must "outsail any vessel belonging to the United States or elsewhere. Speed and sound materials are the only requirements demanded of the builder."

The *Stag Hound* was the pioneer of the "extreme" clipper fleet that were distinguished then and since by the name "California Clippers." She only carried her registered tonnage of dead weight. With the extreme sharpness of ends was given a large increase of the propelling power,—masts, yards, canvas, etc., which innovation by her builder was regarded with ominous head-shaking by the experts of those days,—but such was the attention paid to mechanical details that, unlike the many imitations of contemporary builders which were piled up wrecks in Rio Janeiro and Valparaiso, the *Stag Hound* always arrived out safely and made Donald McKay's name famous the world over.

She was ready for launching in less than four months

**The (Boston) Atlas*, December, 1850.

after the contract was signed and on December 7, 1850, nearly fifteen thousand people gathered to see her take the water. It was a very cold day and it was feared that the tallow might freeze on the ways but this was avoided by using boiling hot whale oil. The foreman of the yard christened her with a bottle of Medford rum and was so excited at the time that he almost forgot to name her.

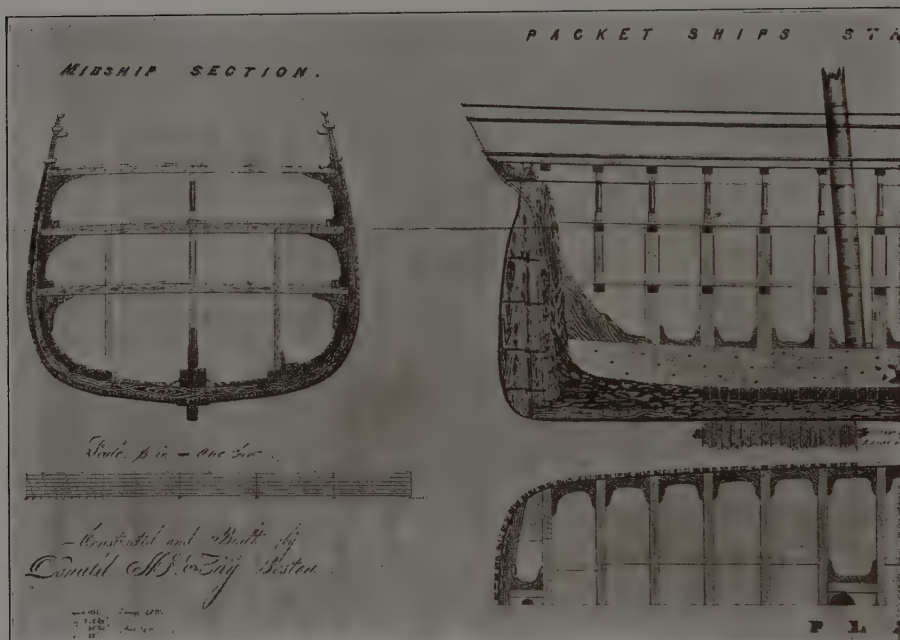
The *Stag Hound* sailed from New York in January, 1851, and when six days out in a heavy gale lost her maintopmast and three topgallantmasts. She was without a maintopsail for nine days and without topgallantsails for twelve days, and reached Valparaiso under jury rig after a passage of 66 days, the shortest but one ever made up to this time to that port and finished the run to San Francisco in 107 days — a record breaker. From San Francisco the *Stag Hound* sailed for China, where she was loaded with teas and China cargo at Whampoa, leaving there Oct. 9, 1851 and arriving at New York in 94 days' passage which was an unprecedented run especially at that bad season of the year. Her second voyage was also to San Francisco, China and back to New York. The homeward passage was made in 95 days. On Aug. 30, 1853, this ship experienced a typhoon in latitude 20° N., longitude 128° E., which continued for six days without abating, the ship being under bare poles the whole time, and sustaining no injury. In February, 1858, the *Stag Hound* made the run from Boston Light to the equator in thirteen days, beating all records. After most excellent profitable service she was sold by Sampson & Tappan of Boston in 1863 and while partly if not wholly loaded with soft coal on a voyage for San Francisco was totally destroyed by fire off the coast of Brazil.

In 1851, Donald McKay built four ships the *Flying Cloud*, 1,782 tons, the *North America*, 1,464 tons, the *Staf-*

fordshire, 1,817 tons, and the *Flying Fish*, 1,505 tons. The first three were contracted for by Enoch Train & Co. and the *Flying Cloud* while on the stocks was sold to Grinnell, Minturn & Co., and proved to be one of the fastest clippers ever built. Twice she made the passage from New York to San Francisco in *eighty-nine* days. Her greatest run during twenty-four hours was 374 miles and during three consecutive days she made 992 miles. She measured 225 feet between perpendiculars on deck and her extreme breadth of beam, of 41 feet, was abaft midships. Her bow was the sharpest ever seen and she drew more water forward than aft by at least a foot which was thought by many at the time she was launched to be a radical defect. But her builder thought otherwise and predicted that she would be "the swiftest vessel in the world" and so it proved. Mr. Train said many times that there were few things in his life that he regretted more than parting with this ship. In 1863 the *Flying Cloud* was sold to James Baines of Liverpool and was destroyed by fire in 1874 at St. John, N. B.

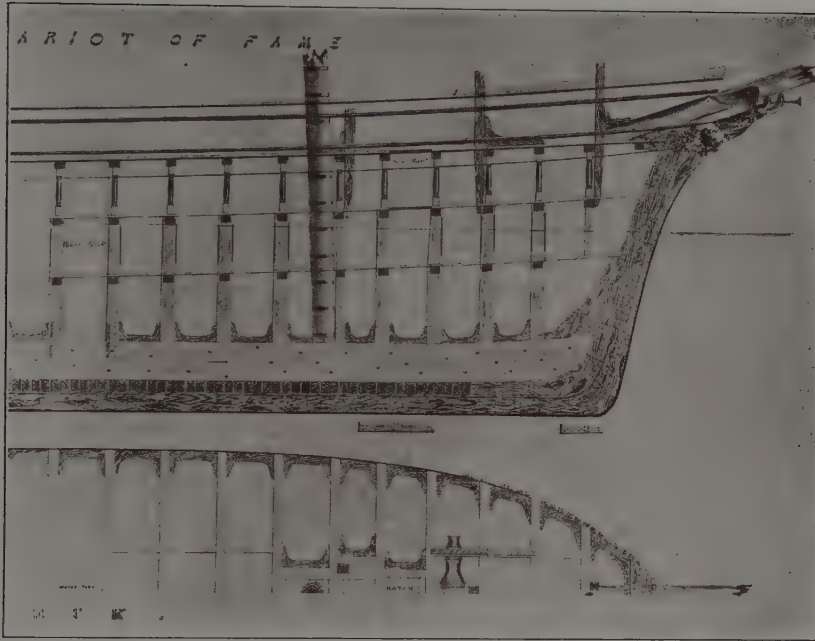
The *Flying Fish* was designed to sail with any vessel ever built and much resembled the *Flying Cloud*. At the time she was considered a handsomer ship but never equalled the latter's record, although she was very fast. She was owned by George B. Upton and Sampson & Tappan, who owned the finest clippers sailing out of Boston.

The *Flying Fish* and the *Sword Fish*, built by William H. Webb of New York, both sailed for San Francisco on November 11, 1852, and large wagers were laid on the race that followed. The flying ships rounded Cape Horn, part of the time side by side, after which the *Sword Fish* outsailed her rival and reached San Francisco in ninety days and sixteen hours from New York, beating the *Flying Fish* by nearly eight days. The next year the *Flying Fish* passed



SECTIONAL DRAWING OF THE "CHARIOT OF FAME," BUILT BY MCKAY
From the original at the Peabody Museum, Salem

Sandy Hook on November 1st, two days after the *John Gilpin*, built the previous year by Samuel Hall of East Boston. She reached the equator before the *John Gilpin*, which passed her south of the line, but the *Flying Fish* came alongside just off the Horn. From here both clippers showed remarkable speed and the McKay ship finally made San Francisco in ninety-two days beating her rival by only one day, in a passage of fifteen thousand miles. This fine ship was wrecked in November, 1858, while coming out of Foo-Chow with a cargo of tea. The underwriters sold her to a Spanish merchant in Manila and she was floated and rebuilt and her name changed to *El Bueno Suceso*. She at last foundered in the China Sea.



SECTIONAL DRAWING OF THE 'CHARIOT OF FAME,' BUILT BY McKAY
From the original at the Peabody Museum, Salem

In the fall of 1851, Mr. McKay was notified by the city that the land occupied by his shipyard would be taken over for an extension of Border street and he at once established himself on a new location a short distance north of his old yard, and was ready to lay a keel about the first of January. In this yard he built, during the year 1852, the *Sovereign of the Seas*, 2,421 tons, the *Westward Ho*, 1,650 tons, and the *Bald Eagle*, 1,704 tons.

The *Sovereign of the Seas* when launched in June, 1852, was the largest merchant vessel afloat. McKay had built her on his own account and designed her to be the swiftest as well as the largest sailing vessel in the world, and as such she was named for the pride of the British navy built at

Woolwich dockyard in 1637, the largest vessel of its time and the first to be built with "flushe deckes." The keel of the seventeenth century ship measured 187 feet and 9 inches, and her breadth of beam was 48 feet and 4 inches. She had three decks, a poop and topgallant forecastle and "bare five lanthorns, the biggest of which could hold ten persons upright." McKay's new clipper had a deck length of 258 feet and was built with the longest and sharpest ends of any ship or ocean steamer then afloat or under construction. Her deadrise was less than any of her predecessors. The length of her mainmast was ninety-three feet and she spread nearly twelve thousand yards of canvas.

The command of the *Sovereign of the Seas* was given to Capt. Lauchlan McKay, a brother of the builder, and she sailed from New York, August 4, 1852, bound for San Francisco with a cargo of 2,950 tons, exclusive of stores for a year's voyage, — the largest cargo at that time ever dispatched from the port of New York. On reaching San Francisco one of her crew wrote home an account of the voyage and declared her to be the swiftest and finest vessel under every circumstance that he had ever seen. On leaving New York the wind blew a gale and she "clawed off shore like a pilot boat, carrying whole topsails, courses, jib and spanker." He wrote of Captain McKay as "an easy, good-natured sort of man, careless of display. . . . Our chief mate, who was a swaggering, swearing bully, laughed in his sleeve at what he sneeringly termed the simplicity of the 'carpenter.' Our Captain, you know, is a carpenter, has served in that capacity in the United States Navy* and is the author of a valuable work on Naval Architecture. Since

*Capt. Lauchlan McKay served four years on the U. S. frigate *Constellation*. His work on *Naval Architecture* was published in 1839, while he was living in East Boston. In 1842 he appears in the Boston Directory as a "marine architect," living at 15 North Russell Street. About this time with his brother Hugh, he opened a shipyard at East

leaving the Navy, however, he has commanded several vessels and proved himself a most successful shipmaster. Whether the mate knew these facts or not, I do not know; but he presumed that the Captain was only a man of straw and soon began to put on airs and to swear at the men. This the Captain checked at once, privately, but in so mild and gentlemanly a manner that the mate thought the Captain afraid of him and persisted with increasing insolence highly seasoned with Dutch courage. He even went so far as to countermand the Captain's orders and as a result was ordered off duty when only twelve days out. His services were not again required during the voyage."

While on this voyage, the ship encountered tremendous gales off the Falklands, through which she carried a heavy press of sail and actually drove through the heavy seas, the watches standing off and on every four hours. Hail, snow and screamers were her companions, day and night. A sailor aboard wrote that the Captain "carried on sail so as to make it truly frightful to look aloft." This continued around the Horn and on the night of October 12th, during a heavy gale, while under the usual press of canvas, the main topmast trestle-trees settled, which slackened the topmast backstays, and away went the maintopmast over the side, taking with it the foretopmast, foreyard, mizzen-topgallantmast and every stitch of canvas on the foremast. Captain McKay's mettle and ability was shown for not a rope was cut and before sunset the next day everything was on board and the ship under mainsail, crossjack course and mizzen-topsail was reeling off twelve knots. The watches worked both night and day and in twelve days the ship "was once more a-tanto and as complete aloft as if nothing had

Boston where they did repairing and built two or three vessels. In 1847 he commanded the bark *Odd Fellow*, which he had built, and the next year he was in command of the ship *Jenny Lind*. He was a man of huge frame and possessed of great strength.

happened." Her run from New York to San Francisco was made in 103 days, notwithstanding the disaster, which has never been equalled by a vessel sailing from New York for San Francisco in the month of August. When the ship was hauled into the wharf at San Francisco, the shore was lined with spectators and as the sailors whirled round the capstan, they sang:

"O Susannah, darling, take your ease,
For we have beat the clipper fleet,
The Sovereign of the Seas!"

On leaving the Golden Gate for Honolulu she narrowly escaped running afoul of a hulk and while beating through the Narrows she missed stays and got aground, but was favored by a fair tide and in two hours was got off without injury. After a very stormy passage she reached the Sandwich Islands and took on board eight thousand barrels of sperm oil.

The presence in the Pacific Ocean of the California clippers, which after their discharge of their outward cargoes were obliged to sail in ballast, was a boon to the whaling industry by opening up cheap transportation of their catch from the rendezvous of Honolulu or Lahaine to the home ports of New Bedford, New London or New York. The blubber-hunters, besides being saved all the expense incident to the heretofore necessary long return voyage, were now allowed to continue cruising, immediately after refitting, so that there was benefit to all concerned.

As the crew had been shipped for the run, great difficulty was experienced in getting a new crew but finally thirty-two men and two soldiers were scraped together and the ship cleared for New York on the 13th of February. On the voyage out there were 103 men and boys in the crew

She had light, baffling winds to the equator and until 48° south was reached when the wind came in from the northwest. For the ten days following March 11th the ship averaged 314 miles per day or a total of 3,144 miles, and on the 18th she made 424 nautical miles within twenty-four hours. At the time "the sea was high and broken with passing showers. She ran about as fast as the sea and sometimes, when struck by a squall, would dash into a lazy wave and send the spray mast-head high. Occasionally she would fly up a point or more and keeling over, skim along the deep valleys between the lofty waves, and then, when brought to her course again, righten with majestic ease and as if taking a fresh start, would seem to bound from wave to wave, the sea, the while, curling in mountains of whitened foam along her sides. At night, the light of the moon as it glimmered through the passing clouds, blended with the phosphorescence of the broken waves and as far as the eye could see, the ocean seemed on fire. Sixteen of our scanty crew were now sick leaving us only nine in a watch and I will leave to your imagination what must have been our situation had we broached to or been struck aback while carrying such a press of canvas."*

The passage from Honolulu to New York was made in eighty-two days, the shortest known, and the 424 nautical miles that she sailed within one twenty-four hours was a greater distance than ever before sailed in one day by any ship or ocean steamer in the world. The actual earnings of the ship on the first round voyage were stated as being about \$135,000.

The *Sovereign of the Seas* sailed from New York on June 18th, 1853, bound for Liverpool, and among the passengers was Donald McKay, visiting England for the first time to

**The (Boston) Atlas*, May, 1853.

examine the principal shipbuilding yards but primarily to ascertain by personal observation, while afloat on the finest and fastest ship yet built, what improvements, if any, he might be able to make in clipper ship models. We may imagine that much of his time during the voyage over was spent on deck watching with keenest observation every movement of the ship and every strain on spars and rigging, and the statement appears in the *Boston Traveller*, after his return, that the voyage had "suggested several important improvements in the modelling of clippers." When he returned home, Enoch Train asked him what he thought of the ship, and McKay replied, "Well, she appears to be a pretty good ship, but I think I can build one to beat her;" and eventually he did so.*

The *Sovereign of the Seas*, on reaching Liverpool attracted much attention and soon after was chartered by the Black Ball Line to load for Australia. Captain McKay gave up his command and on September 2d was back in Boston having crossed in the steamer *Europa*. McKay's racer sailed for Melbourne on September 7, 1853, and made a tedious passage of seventy-seven days with light winds the entire way. Nevertheless she outsailed all the other ships clearing about the same time. On the return voyage she brought the mails and over four tons of gold dust which narrowly resulted in a mutiny designed to loot the treasure. The great ship was later sold to German owners and at last was wrecked August 6, 1859 on the Pyramid Shoal in the Straits of Malacca and became a total loss.

Donald McKay returned to Boston before his brother, having found that time devoted to the English shipyards might be spent to greater advantage in East Boston directing the construction of his new wonder, the clipper ship

*Clark. *The Clipper Ship Era*, p. 221.

Great Republic, the keel of which had been laid before he sailed. The news of the construction of this ship, with a stowing capacity of about six thousand tons, aroused much interest in England and while there he was offered \$250,000 charter for her from Liverpool to Australia and the Chincha Islands and back to Liverpool, which he refused thinking that he might do better in loading her for California at seventy cents per foot. He also brought home with him contracts from James Baines & Co. of Liverpool, for the construction of the *Lightning*, *Champion of the Seas*, *James Baines* and *Donald McKay*, those masterpieces of the shipbuilder's art. These were all of about 2,500 tons registry and were launched in rapid succession the following year.

McKay discovered in the English shipyards that conservative, old-fashioned methods prevailed, but the necessity for more speedy ships was recognized and the so-called Aberdeen model was being adopted. This consisted, mainly, of a sharpening of the bow by carrying out the stem to the cut-water.

Shipyard methods had changed but little. In America, the building of great ships within a time limit had resulted in radical changes in the manner in which work was carried on. In the old days the shipwright was a man of all trades and could hew out the frames and set them up; line out his streak of planking on the timbers, fit his plank, bore the holes for the treenails, fasten the plank and perhaps afterwards even calk the seam. When several hundred men were employed in a yard it became necessary to divide up this work and to allot different gangs of men to do carpentry, calking, fastening, joining, painting, etc. All these different kinds of work in time became trades and through continued application better work was obtained. Donald McKay not only realized the desirability of differentiating

his labor but he also introduced into his shipyard various devices to save labor. Up to the time when he removed to East Boston all the frame timbers of a vessel had been laboriously hewed out of the rough log with broadaxes and timbers that needed to be cut lengthwise were sawed into required sizes with a long saw manned by two men. McKay, however, set up in his yard a steam sawmill in which the saw was hung so that it might be tilted in two directions, while in motion and with this saw three men could get out frames to the correct bevel as fast as twelve men could set them up. The work of the yard was thereby tremendously lightened and facilitated and the frame of a ship could be got out and put together in a quarter-part of the time it previously had required.

Formerly all the heavy lifting and moving had been done by man power. When a keelson piece or a beam had to be placed it always required a large force of men to pick up and shoulder it to its required position. The heavy planking was carried from the steam-box to the hull in the same way. This laborious method of working resulted in a great loss of time, both in handling the material and also in the application of labor, for every now and then all hands had to be called off from work to spend time in carrying about a huge plank or stick of timber with more or less standing by while it was fastened into place. This was all changed and teams of oxen and horses were employed to do the hauling about while derricks were set up to lift the timbers and beams into position.

Treenails since time immemorial had been cut out by hand in a shed on rainy days; but a lathe was soon introduced by McKay to do this work. Even the ironwork began to be turned out in quantity by machinery and before long the saving in labor amounted to thousands of dollars



SCENE IN AN EAST BOSTON SHIPYARD
From a wood engraving in "Gleason's Pictorial"

in the cost of a large vessel. The bevel saw used in McKay's shipyard, after doing yeoman service in the framing of famous clipper ships, was sold in 1869 for further use in a yard at Bath, Maine.

Success always breeds envy and back-biting and Donald McKay was frequently the mark of some of his competitors. For years it had been the custom for owners to send one of their sea captains, a man experienced in sailing a ship, to quarter himself in a shipyard and there to represent them and closely inspect the progress of construction and check any improper materials or defective work. One day one of these shipmasters, a pompous man, who, like many other shipmasters had rarely seen a ship in frame and who would have had great difficulty in naming the various parts of a ship's skeleton, while in the McKay yard with the owners of a vessel then on the stocks, with an impressive manner said to the builder:

"Mr. McKay, I want this ship properly fastened, for I understand you do not pay sufficient attention to this part of your business. At least so Mr. ——— says." "Indeed!" replied McKay. "And you believe him do you? Now to show these gentlemen that I will fasten this ship to suit you, take this chalk and mark how you want these sister-keelsons fastened."

The big man stood nonplussed. He looked at McKay, then at the keelsons, then at his owners but didn't open his mouth. He then began to stoop, when, as if struck with a new idea, he straightened up again and again looked at McKay and then at the keelsons. All this time not a word was spoken. At last the whole party burst into a loud laugh when the shipmaster threw the chalk on the ground and exclaimed, "Damn the ship."

"Don't swear, man," said McKay, "but acknowledge to

these gentlemen that you don't know anything about shipbuilding and that you have allowed your mind to be poisoned by the falsehoods of my enemies."

On another occasion a superintending shipmaster frequently interfered with the carpenters and one day objected to putting in a certain breasthook which he claimed was decayed. Mr. McKay happened by and after examining the hook offered to bet the shipmaster a hundred dollars, money down, that with the best iron-wedge and maul in the yard he couldn't in a whole day penetrate eight inches into what he called the decayed wood. The shipmaster was game and off came his coat and to work he went at last giving it up as a bad job, for the hook was of gnarled live oak. Some sawdust in the crevices of the knot had led him to believe that the wood was decayed. After the bystanders had had their laugh, McKay tossed the captain the hundred dollars and advised him to spend it in studying shipbuilding.

Between November, 1845, and June, 1853, Donald McKay had built at East Boston, twenty-eight ships with a total tonnage of 32,117 54/95 tons and now he had on the stocks what we designed to be "the King of the Clippers" — the *Great Republic* — the largest extreme clipper ever built. Not finding anyone to join in the undertaking he was building her on his own account. This ship had a registry of 4,555 tons and a length of 335 feet, with four decks and four masts, the after-mizzen or spanker-mast being bark-rigged.

The *Great Republic* was launched shortly after noon on October 4, 1853. It was a great day for Boston. The Mechanics' Fair had opened and large numbers of people from all along the coast had come to see the ship and the launch. Such was the interest that crowds had been visiting the

McKay yard for some weeks and it was estimated that each of the previous two or three Sundays nearly ten thousand persons had crossed the ferry to see the ship. As the time drew near, there must have been some fifty thousand spectators who crowded the yard and adjacent streets. Other vantage points were Chelsea bridge, the Navy Yard and the buildings and wharves at the North End of Boston. The shipping in the harbor and at the Navy Yard was gaily dressed with colors. It was a beautiful day with a sky as clear as a bell. The long, black hull of the ship was in full view with no ornament save the carved eagle's head at the bow and the flags flying from temporary spars.

At eleven o'clock, ship-carpenters from other yards, with mauls on their shoulders, joined the McKay men and half an hour later they began to "wedge her up," and at 12.05 o'clock she began to move down the ways when Captain Alden Gifford, standing in the bow, christened her "with a jar of pure Cochituate," the standard drink of the City of Boston, and in the excitement of the moment lost his hat overboard. Cannon boomed, whistles on tugs and locomotives shrieked and fifty thousand people yelled and for the moment were happy. The seafaring fraternity gave her the sailor's blessing:

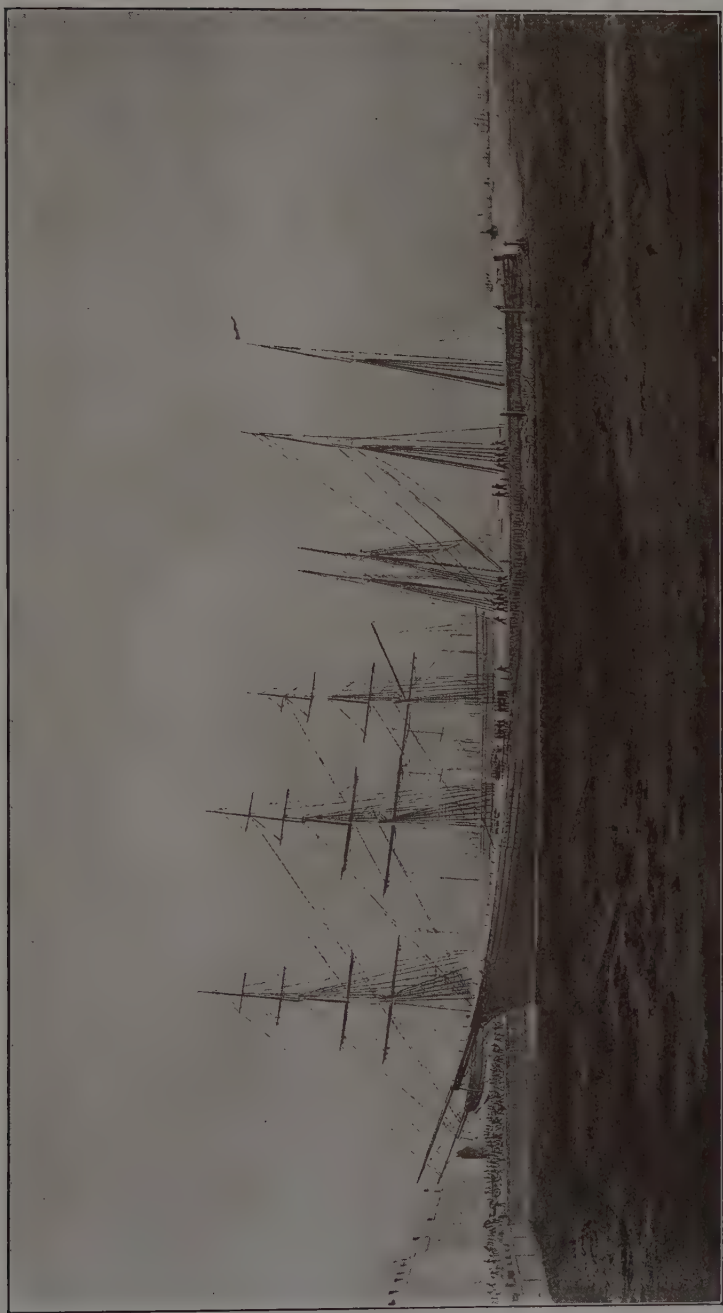
"In port, high freights; at sea, fair winds; and may they never know the want of tobacco," and all seemed well.

After receiving her masts, yards and rigging at the Navy Yard, the *Great Republic* was towed to New York City, to load for Liverpool and thence to Australia. At that time the vessel represented an investment by Donald McKay of nearly \$300,000, and it was confidently expected that he would realize a fortune from her. On the night of December 26th, the great ship lay at her wharf nearly ready for sea, her sails bent, when a fire broke out in a small bakery,

a block away, with the wind blowing a gale directly from the fire towards the ship. The tide was out and all the vessels of deep draft lay imbedded in the mud so that none could be moved. In a short time the sails and rigging of the *Great Republic* were in flames. The masts were cut away in an effort to save the hull but a burning topmast came down and going through three decks set the cargo afire and soon the fire was beyond control and the ship was scuttled in three places. Every effort was made to save the hull but it burned for two days until the water's edge was reached. Two other ships were destroyed. The underwriters took over the hull and paid in full their indebtedness amounting to \$235,000. Mr. McKay had refused an offer of \$280,000 for the ship, only a few days before the fire. He returned from New York convinced that all had been done that man could do to save her and the next day was at his shipyard making ready to launch another clipper—the *Lightning*, built on order for James Baines & Co. of Liverpool, and the first to be built in the United States for an English house.

The wreck of the *Great Republic* was subsequently sold by the underwriters and rebuilt when she registered 3,357 tons. Even then she was the largest merchant ship of her time. She was used as a troop ship during the Crimean War and also during the Civil War, and in more recent years was used at Gibraltar as a store-ship for coal.

Donald McKay never fully recovered from his severe financial losses occasioned by the burning of the *Great Republic*, but he continued to build ships for the Australian trade principally on English order. In March, 1854, he purchased 52,000 feet of land adjoining his upper shipyard. At that time he had three ships in the stocks. In this enlarged yard he shortly erected a sawmill, a building 150 feet long and equipped it with steam power and saws, planers



CLIPPER SHIP "GREAT REPUBLIC" AFTER THE FIRE, LYING IN HER DOCK AT NEW YORK

From an oil painting in possession of Nichols L. McKay

and other machinery to facilitate the ready handling of materials.

In June, 1854, he announced his intention to establish a line of packet ships to ply between Boston and Europe, to be known as the McKay Line. Associated with him in this undertaking was his brother Capt. Lauchlan McKay. Construction on the first ship, the *Japan*, already had begun and the keels of three others were very shortly to be laid. These were to be the *Commodore Perry*, *Republic of Commerce* and *Stranger's Home*, all to register about 2,200 tons, "have three decks, be diagonally braced with iron and fitted up in the best manner" — "with special reference to peopling Nebraska from the continent of Europe." This project fell through, however, and the *Japan* and *Commodore Perry* were sold to James Baines & Co. of Liverpool. The other two were never built. That year he built eight vessels with a registered tonnage of 14,719 tons.

In the spring of 1855, the Legislature of Massachusetts incorporated Donald McKay, George B. Upton, Enoch Train, Andrew T. Hall and James M. Beebe, under the name of the Boston and European Steamship Company, with a capital of \$500,000, "for the purpose of navigating the ocean by steam." The plan was to build "a splendid line of Atlantic steamers rivalling in every respect the Collins line of New York," and Milford Haven was thought of as the terminal port in Great Britain. It was felt that there should be an American line of steamers at this port, under full control here. The Cunard steamers had been temporarily withdrawn from the New York service, the company having chartered several of its ships to the British government for its use in connection with the Crimean War; and there was a rumor that the Boston steamers were to be withdrawn also.

A public meeting was held on the Exchange, July 12th, in the interest of the proposed line; George B. Upton presided, and a model of a paddle-wheel steamer, to be called the *Cradle of Liberty*, was shown by Mr. McKay, which was to cross the Atlantic in six days. Stirring speeches were made by George R. Sampson, E. Hasket Derby, and Enoch Train. Mr. Train's remarks, are now interesting, as showing that as late as 1855, although the Inman screw steamers had been running to Philadelphia or New York for four or five years, and the Cunard Company had built some iron propellers, — cargo steamers, — which made occasional passages to Boston, the wooden paddle-wheel steamship still held its own, and the sailing packets had hardly begun to feel the competition of steam. "It had been thought," said Mr. Train, who was a public spirited citizen and a generous-hearted man, "that he would oppose the line, as antagonistic to his own. He should do no such thing. There is a vast difference," he added, "between steam and sailing vessels, and steam would not interfere with his regular business, — the transportation of coarse and weighty commodities, and passengers who could not afford the luxury of a steam passage. He would, instead of opposing the proposed line, lend it the strength of his right arm." Resolutions were adopted and a large committee was appointed, but the matter went no further.

During the year 1855 only four vessels were built at the McKay shipyard, the largest being the *Donald McKay*, 2,594 tons, built for James Baines & Co. A reaction was setting in; too many ships had been built for the California trade where the rush to the gold mines was over. Moreover, the settlers of that new territory, were producing much of the food and many of the common necessities that previously had been sent out by clipper ships. The rates for

freight fell off one-half and many of the ships employed in the California trade were diverted to world commerce. Steam vessels also had been built to compete with the clippers and by 1857 most of the passenger, mail and express business was being carried by steam. There was also a falling off in immigration from across the Atlantic and the financial panic of 1857 was a crushing blow. The outbreak of the Civil War and the depredations of the Confederate cruisers brought about losses from which the American commercial marine has never fully recovered.

During the summer of 1856 there was little demand for ships but all the yards had vessels on the stocks and it was hoped that in the coming fall business would show an improvement especially as the guano trade was requiring more and more tonnage. McKay had a 1,300 ton ship ready for sea, which was for sale, and another vessel of about the same size was nearly ready for launching. Late in September, like a bolt from a clear sky, came the announcement that Donald McKay had failed. The contemporary newspapers contained many expressions of sympathy over his ill-fortune and declarations of a belief that he would be able shortly to resume business. The *Boston Daily Atlas* summarized the facts as follows:

"We cannot but express our regret that a man who has done so much to advance the science of naval architecture should ignobly sink to his present position, the victim of a heartless conspiracy. But he has no one to blame but himself; he took a deceitful man to his bosom, knowing him to be such, and he had no right to expect that he would spare him the moment he was in his power. He knew that he had outwitted others who had befriended him and he ought to have been on his guard. . . . Mr. McKay says that he never lost a dollar by building any one of his ships. His

failure he attributes to misplaced confidence. He has no cause for complaint against those for whom he has worked; they have all treated him generously. No man has been more encouraged or has had more devoted friends. Members of his own family have dug his grave; but he is determined not to lie down in it. Encouraged by Colonel Train, his first and best friend, and by many others, he hopes now to renew his career of usefulness and to show that he 'still lives.'"

At the time of the failure, McKay's assets amounted to \$375,000 and his liabilities to only \$230,000, showing a balance of about \$135,000 in his favor. But this was mostly in the form of real estate and not immediately available. The climax was brought about by an unexpected loss of \$80,000, "which had been taken out of him by home influence." This large sum added to \$35,000, which he had paid to an agent for less than two years' services, so cramped his resources that his creditors believed it best for all concerned that he should go into bankruptcy so that he might begin afresh, unencumbered. Mr. McKay believed that had he been given an eight weeks' respite he would have been able to pay all his notes and to have continued his business; but this extension of time was denied him, although his creditors did not force a sale of the real estate which, owing to the depression in business and consequent fall of property values, would only have ruined him without benefitting them. During the previous fourteen months he had built 10,075 tons of shipping, which had brought him \$604,500, without a single bad debt. Delay followed upon delay. The great shipyard lay idle. Late in the winter all of his creditors but two or three had agreed upon a settlement and Mr. Train, his largest creditor, was urging a release from chancery.

In the summer of 1857 it was announced that the Gov-

ernment had determined to build a steam sloop-of-war and McKay applied himself energetically in preparing a model, plans and drawings, which were submitted but he did not receive the contract. He did build a steam cutter for the Government and about that time he received from the Russian Government a contract to build several war vessels. His financial difficulties had been adjusted satisfactorily and his yards, entirely within his control, were among the largest and most complete as to equipment of any in the country. In December of that year he was beginning work on a ship to measure about one thousand tons but the shipping business was almost at a standstill and there were many idle ships in all American ports and most of those at sea could not clear expenses. It was a hopeless situation even for a man of undaunted courage and the McKay shipyard at last was closed to wait for better times.

In 1859 the yard was opened again and the ship *Alhambra*, 1,097 tons, which had been on the stocks for over a year was finished and the schooner *Benjamin S. Wright* 138 tons, was built. In September, Donald McKay sailed for England to complete arrangements covering large timber contracts with the British Admiralty. He also proposed to publish a work on the theory and practice of naval architecture to include an outline of the progress of the art during the nineteenth century with particular reference to the construction of clipper ships; the methods of laying off in the mould-loft; the various materials; and an exposition of the practical operations of building as practiced in his own yard; but nothing came of it and the idea was abandoned. While in England he was permitted to inspect all the Royal Dock Yards and the principal private shipyards in the Kingdom, and the result of his observations he communicated to the *New York Commercial Bulletin* and other pa-

pers. He also crossed to France where every facility was afforded him to examine the dockyards and his observations there were also made public in the *Commercial Bulletin*. When the Civil War broke out he gave to officials in the Navy Department the benefit of his knowledge of naval affairs in England and France and his suggestions were received with marked consideration and some of them were adopted.

The British mail steamer *Trent* was steaming through the *Bahama* Channel on November 8th, 1861, when she was stopped by a United States war vessel and the Confederate Commissioners, Mason and Slidell, found on board, were seized and taken to Fort Warren in Boston Harbor. This seizure created the greatest excitement in England where the members of the Government were either actively hostile to the Northern States or coldly indifferent and threats of war were freely made. Donald McKay was in London at the time and on December 6th he sent a long communication to the "Star and Dial," which was published, in which he corrected some of the misstatements being bandied about in the English press and frankly set out the naval strength of the Northern States and warned the trouble-breeders what might follow in case war should break out.

Having made clear that there were many shipyards in the United States of which his yard, "one of medium extent," had built, launched and equipped in fourteen months, during the years 1853 and 1854, eleven of the largest class of clipper ships with a burthen of about 40,000 tons, he went on to state that his country had a "sufficient number of the most skilful artisans to build a fleet of a thousand large men-of-war ships at the same time and more than the necessary number of seamen to man such a fleet." He pointed out the large existing tonnage of the American merchant

marine; the ability of the naval dockyards to "turn out sixty of the largest class of ships in one year;" the immense amount of ship timber easily available and the untold stores of iron; and prophesied "in case our country should be involved in a naval war, new engines of war will see the daylight, such as the world never dreamt of, and iron-cased ships will be met with destructive agents against whom an iron casing, be it even ten inches thick, will prove unavailable."

"I will only add," he writes, "that I have made this statement not out of any feeling of animosity, but merely with the intention to show the resources of our country for carrying on a defensive war and to show that whatever the ultimate result of an aggressive war on our country may be — hundreds of ships and many thousands of men will have gone to the bottom before its end will have arrived."

These were strong words and coming from a man whose name was so well known in shipping circles, they bore weight and must have affected the judgment of thinking men who read them.

At the outbreak of the Civil War, Donald McKay put his yard into such a position as to enable him to build naval vessels and among those constructed by him were the iron side-wheel gunboat *Ashuelot*, the iron-clad monitor *Nausett*, and the wooden propeller gunboats *Trefoil* and *Yucca*. In 1866, the steamers *Theodore D. Wagner* and *George B. Upton*, each of about 600 tons, were launched from the McKay yard. They were built for the Boston and Charleston Line of Steam Packets and "looked quite clipperly in their general outline." In 1867 followed the brig *North Star*, of 410 tons, and in 1868 three vessels were built including the *Sovereign of the Seas*, named for the successful clipper built in 1852 and wrecked in 1859.

The deplorable state of shipbuilding at that time is shown in a letter that Mr. McKay sent to the "Boston Traveller" and which was published in February, 1868. It related primarily to the shipping interests of the country and the causes leading up to the existing depression. "For myself," he writes, "I have constructed some years twelve ships, while at present I am engaged in building only a ship of 1,285 tons, having already spent two months on her, and I cannot find a merchant who will buy her at actual cost, not including therein my own services. Within a circuit of five miles I can count twenty shipbuilding firms who are now idle and have been since the war, and most of them built from two to four ships annually before the war."

The last merchant ship built by Donald McKay was the *Glory of the Seas*, a full clipper of 2,102 tons burthen, built on his own account for California freighting but in the hope that he might find a purchaser. His hand had not lost its cunning, for in 1874 she made the voyage to San Francisco in ninety-four days. The illustrations in the present volume picture the wonderful beauty of this greyhound of the seas. The building of this ship brought him considerable financial loss but he continued to operate his shipyard with repair work.

During the years 1874 and 1875, he completed by contract with the United States Government the sloops of war *Essex* and *Adams*, each of about 1,200 tons. These vessels until quite recently were still in commission and have won the admiration of many naval officers who served on them because of their superior construction and the ease with which they could be handled. This was his last constructive work.

McKay was then suffering with incipient consumption and his family of young children were exposed to the influ-

ences of life in a growing city so that he decided to take his family into the country and by living close to the soil to effect, if possible, a cure for body and soul. Accordingly he bought a farm of two hundred and fifty acres in the town of Hamilton, Massachusetts, and removed there in 1877. This farm in more recent years became the country home of the late Augustus Peabody Gardner. Here, with his customary mechanical zeal, he began farming with a complete modern equipment. Possessed with the demon of unrest, his life-long habit of work kept him in a constant struggle with his fields and woodlands. Time and again he dropped from sheer exhaustion and at last he fell into his long, long sleep on September 20, 1880.

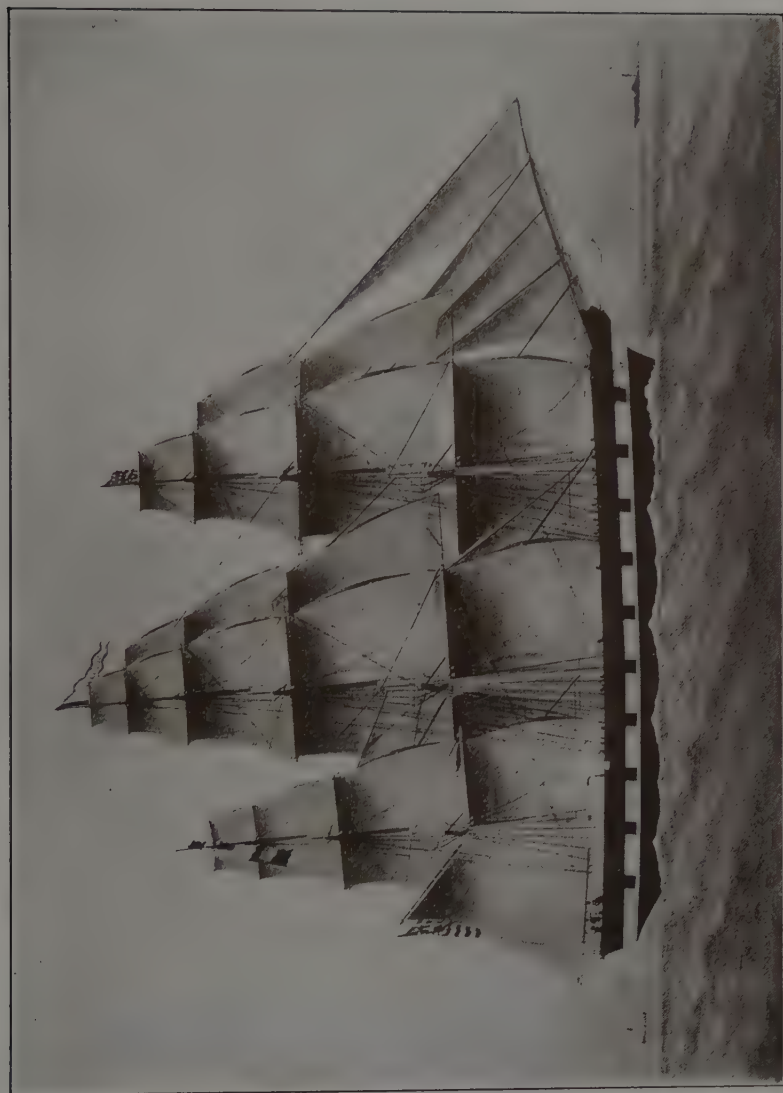
All that remained of Donald McKay, the inspired builder of great, white-winged clipper ships of a bygone day, was laid at rest on a small hilltop in Oak Hill Cemetery, in the sleepy old seaport on the Merrimac where years before he had launched the packet ship that brought him reputation and led on to world-wide fame in his craft.

THE SAILING SHIPS
of NEW ENGLAND

Series Two



[310] SHIP "A. G. ROPES" OF NEW YORK, 2460 TONS, BUILT AT BATH, ME., IN 1884



[311] SHIP "ABAELLINO" OF BOSTON, 606 TONS, BUILT AT MEDFORD IN 1840
From a watercolor made at Marseilles in 1852 by Hré Pellegrin.



[312] SHIP "ABNER COBURN" OF BATH, ME., 1971 TONS, BUILT AT BATH, ME. IN 1882



[313] SHIP "ABNER J. BENYON" OF THOMASTON, ME., 2100 TONS, BUILT
AT THOMASTON, ME., IN 1874

From a painting by Ed. Adam, Havre, 1889, showing the ship in a hurricane on April 16, 1881



[314] SHIP "ALFRED D. SNOW" OF THOMASTON, ME., 2075 TONS, BUILT
AT THOMASTON, ME., IN 1877

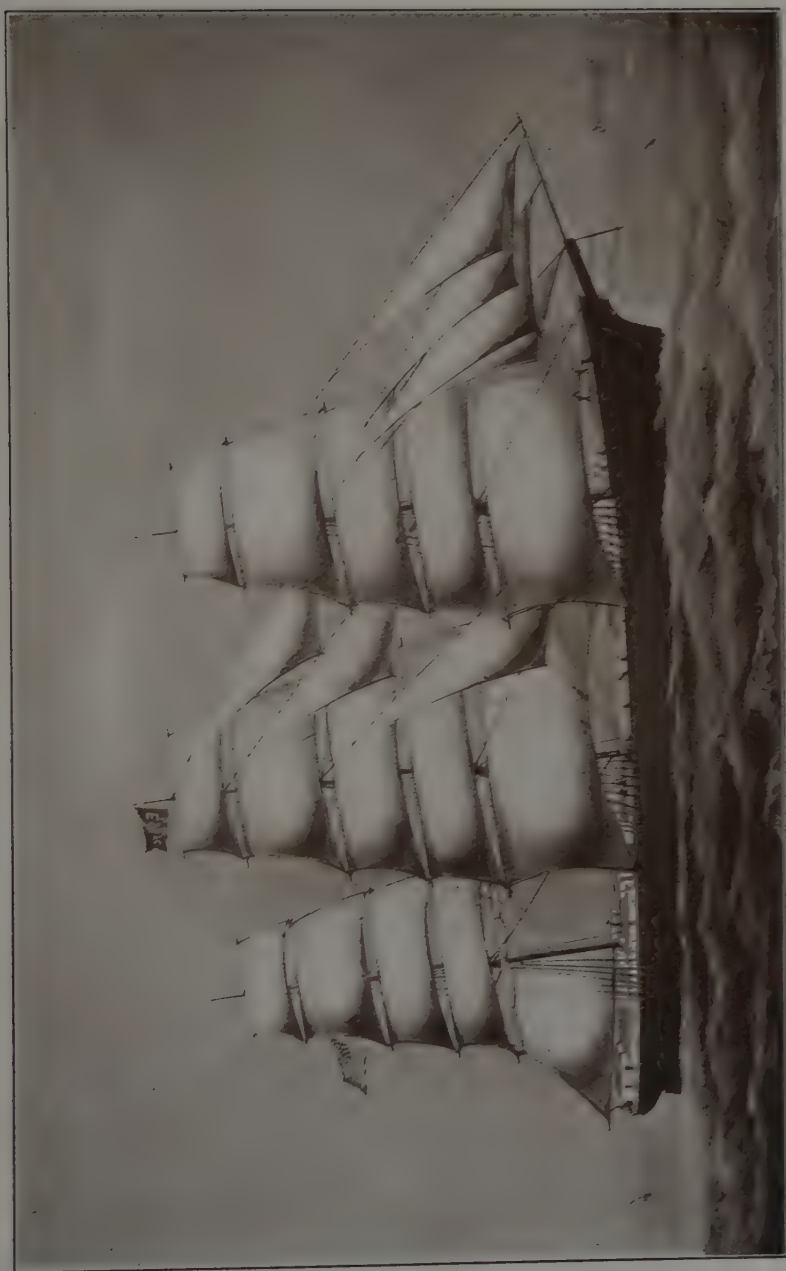


Copyright, George E. Noyes, Newburyport

[315] BARK "ADAM W. SPIES" OF NEW YORK, 1171 TONS, BUILT AT NEWBURYPORT IN 1884



[316] SCHOONER "ADELAIDE BARBOUR" OF NEW YORK, 1171 TONS, BUILT AT NEWBURYPORT IN 1900



[317] SHIP "AGENOR" OF BOSTON, 1487 TONS, BUILT AT BOSTON IN 1870



Photograph by George E. Noyes, Newburyport

[318] SHIP "AGNES" OF BOSTON, 920 TONS, BUILT AT CHELSEA, IN 1852
From an oil painting made in China.



Photograph by George E. Noyes, Newburyport

[319] BRIG "ATHENS" OF NEWBURYPORT, 300 TONS, BUILT AT NEWBURY-
PORT IN 1841



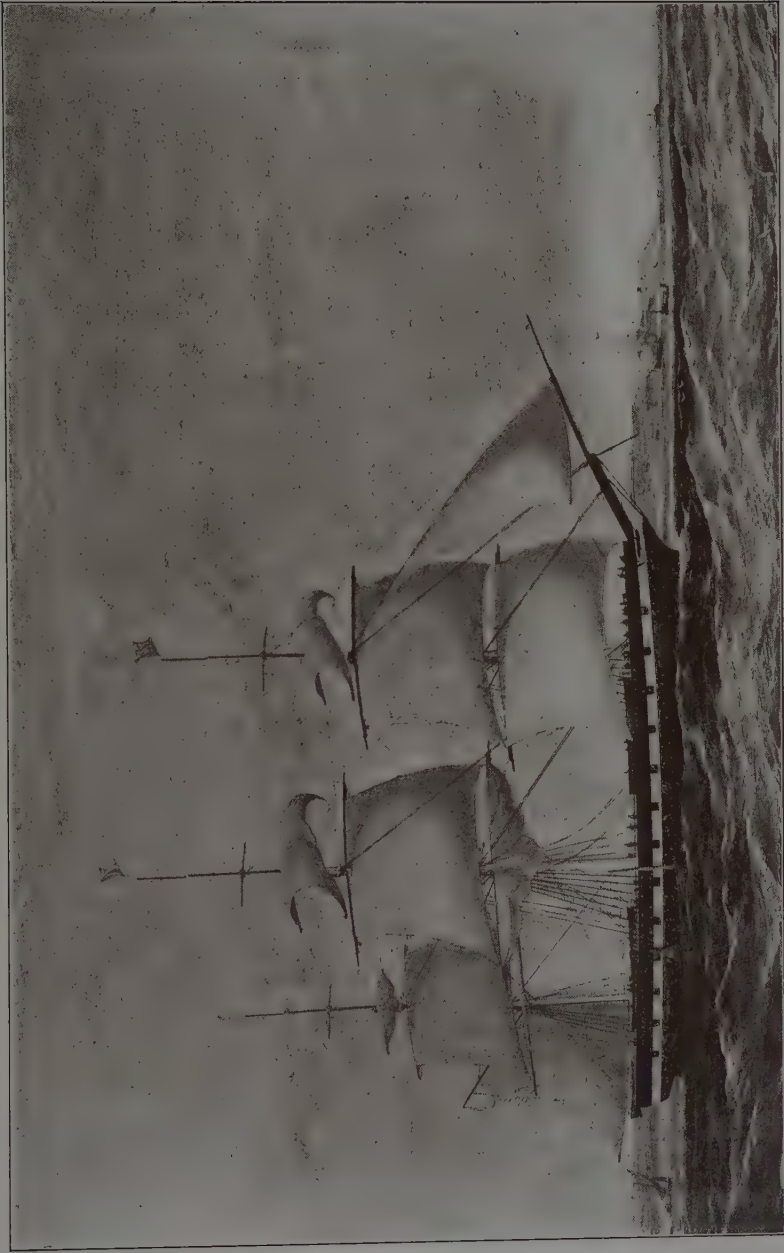
[320] BARK "ALBERT RUSSELL" OF BOSTON, 762 TONS. BUILT AT NEWBURYPORT IN 1875



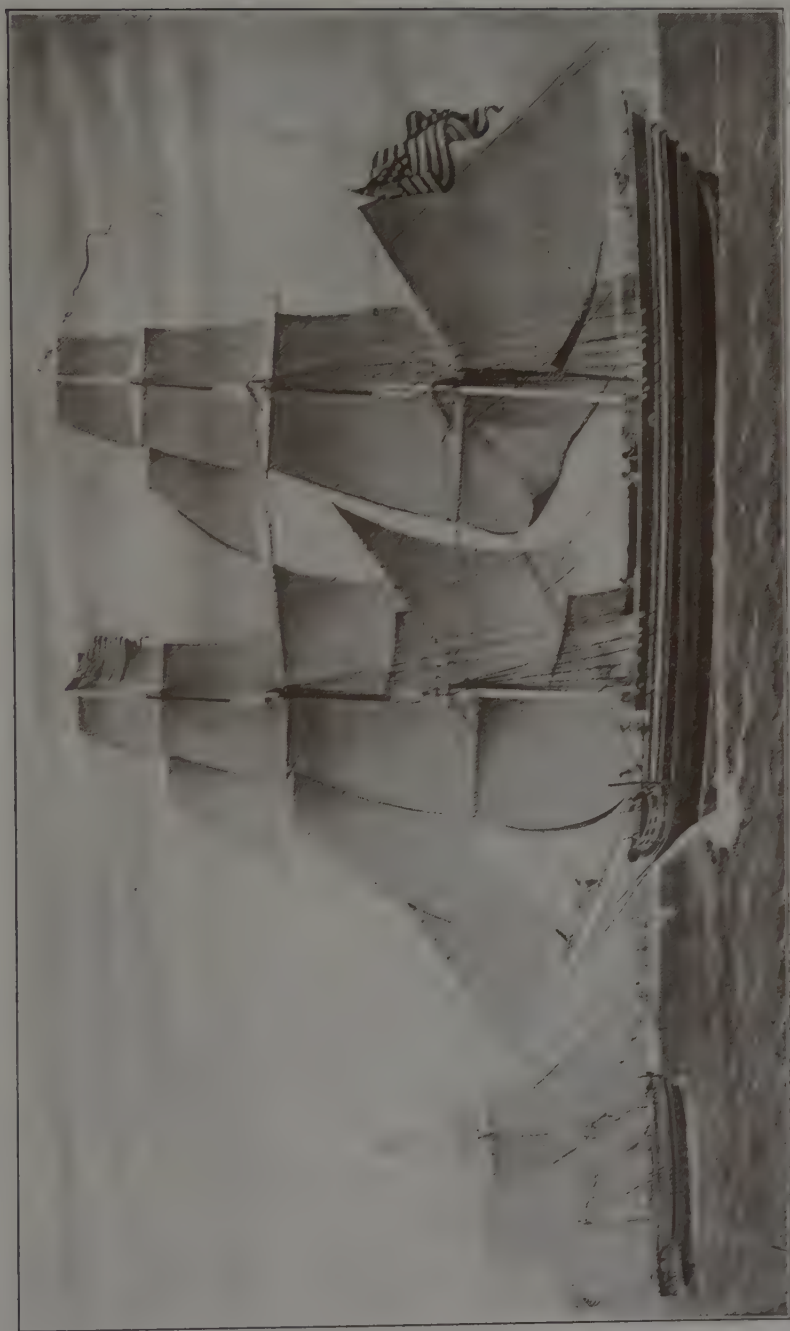
[321] SHIP "AMERICA" OF SALEM, 654 TONS, ORIGINALLY THE FRIGATE "BLONDE" OF THE FRENCH NAVY
From a painting by Corné probably made in 1799.



[322] PRIVATEER SHIP "AMERICA" OF SALEM, 331 TONS, BUILT AT SALEM IN 1804
From a painting by J. Luffs, also showing the ship "Concordia" of Marblehead. In 1812 the "America" was cut down from
473 tons to 331 tons and made into a privateer.

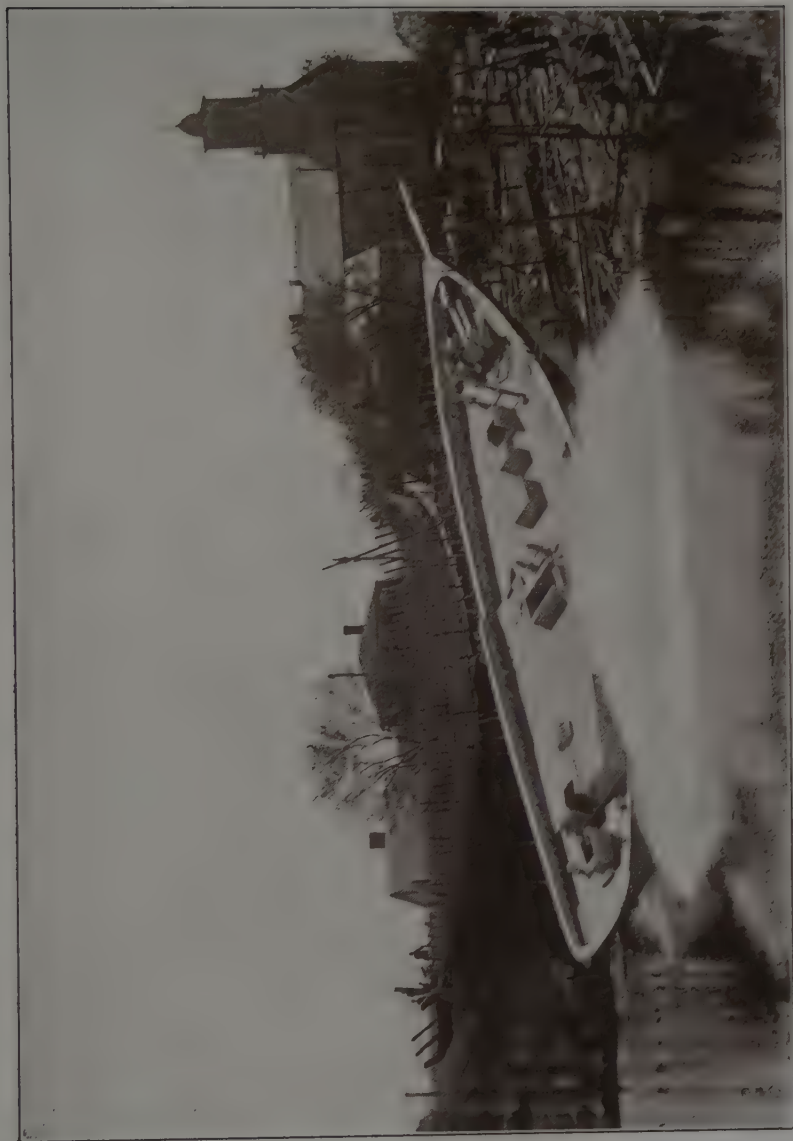


[323] PRIVATEER SHIP "AMERICA" OF SALEM, 331 TONS, BUILT AT SALEM IN 1804
In 1812 the "America" was cut down from 473 tons to 331 tons for a privateer. From an oil painting by Thomas Birch.

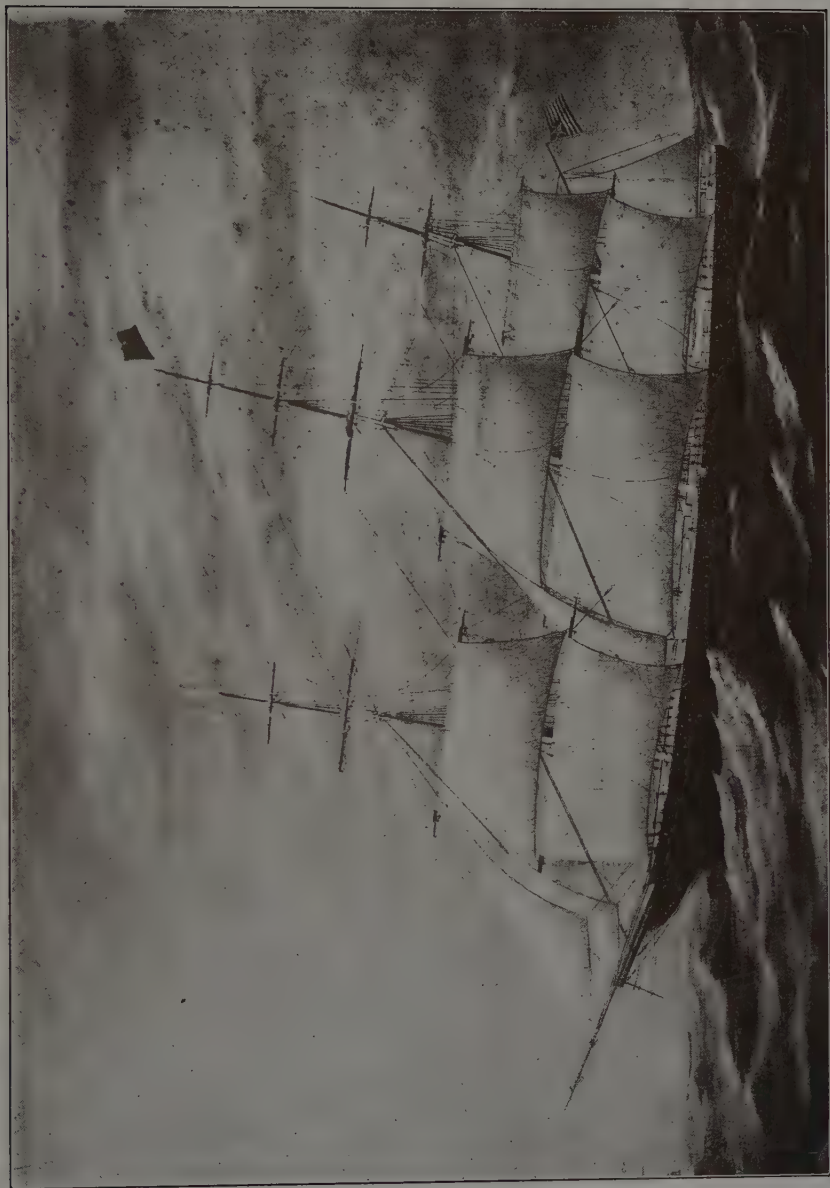


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[324] BRIG "AMERICA" OF NEWBURY, 40 TONS, BUILT AT NEWBURYPORT IN 1838

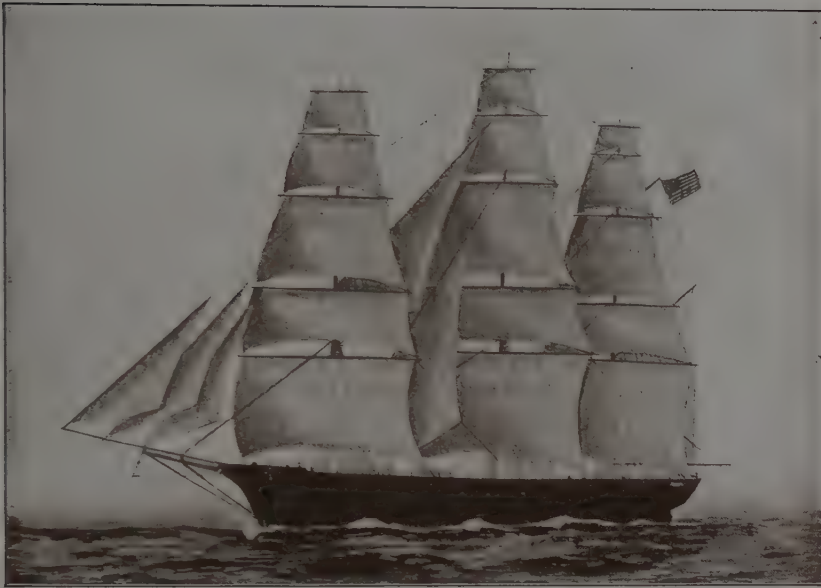


[125] LAUNCH OF THE SCHOONER "AMERICA" OF GLOUCESTER, BUILT AT ESSEX IN 1921

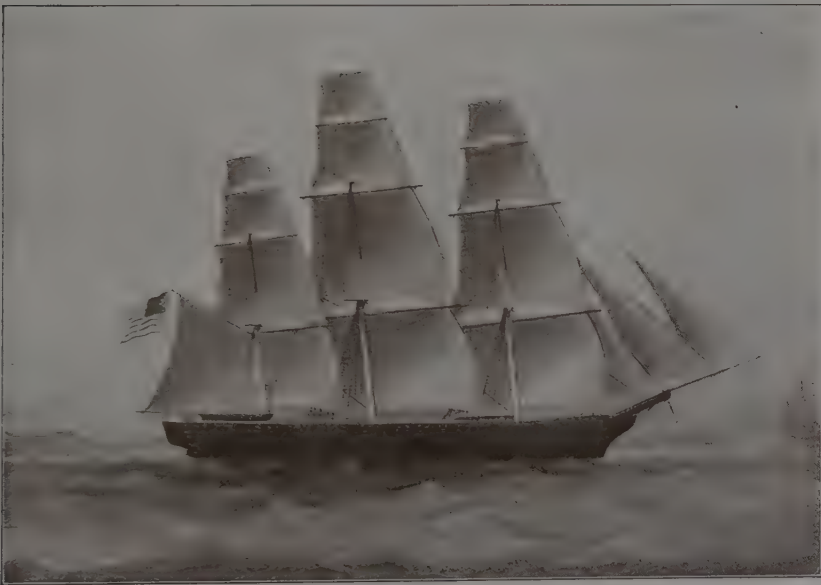


Photograph by George E. Noyes, Newburyport

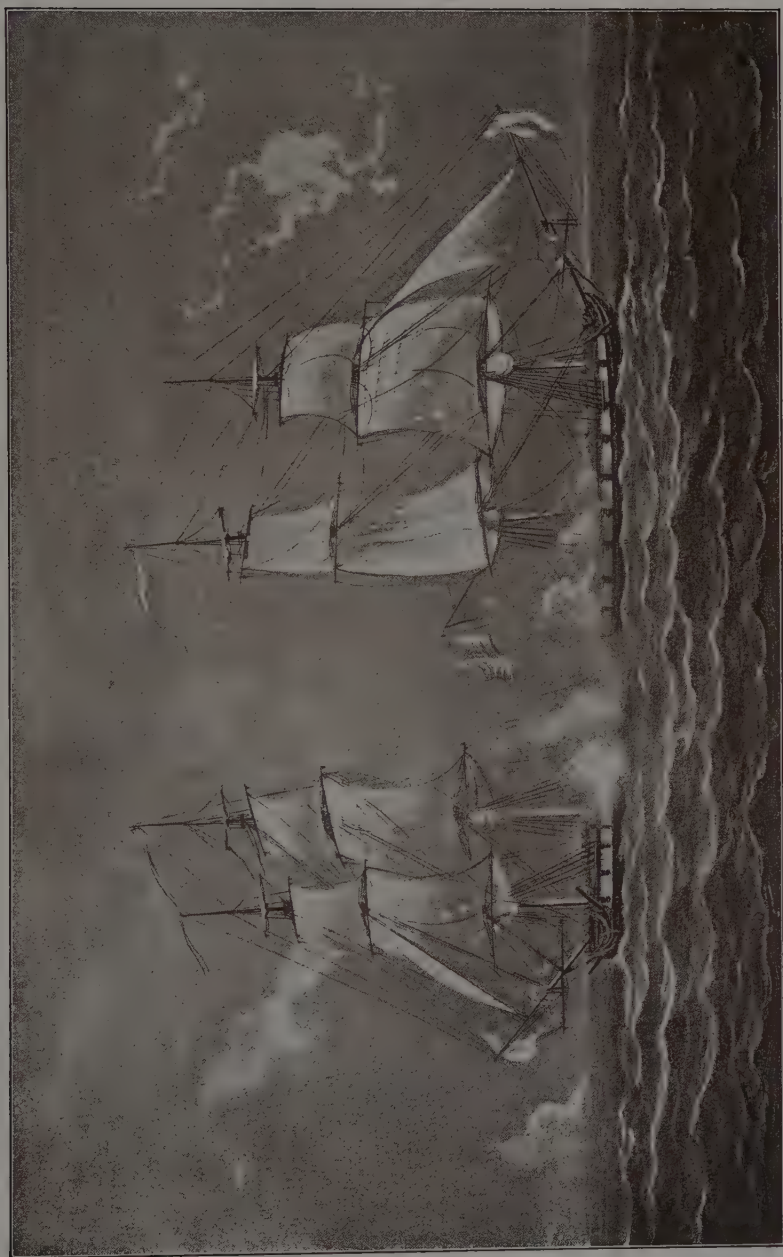
[326] SHIP "ANNA F. SCHMIDT" OF NEWBURYPORT, 784 TONS, BUILT AT BIDDEFORD, MAINE, IN 1854
Captured and burned by the "Alabama", July 2, 1863.



[327] SHIP "ARABIA" OF BOSTON. 1034 TONS. BUILT AT KENNEBUNK IN 1863
From a painting by Macpherson, after C. Kappanf, Hamburg.



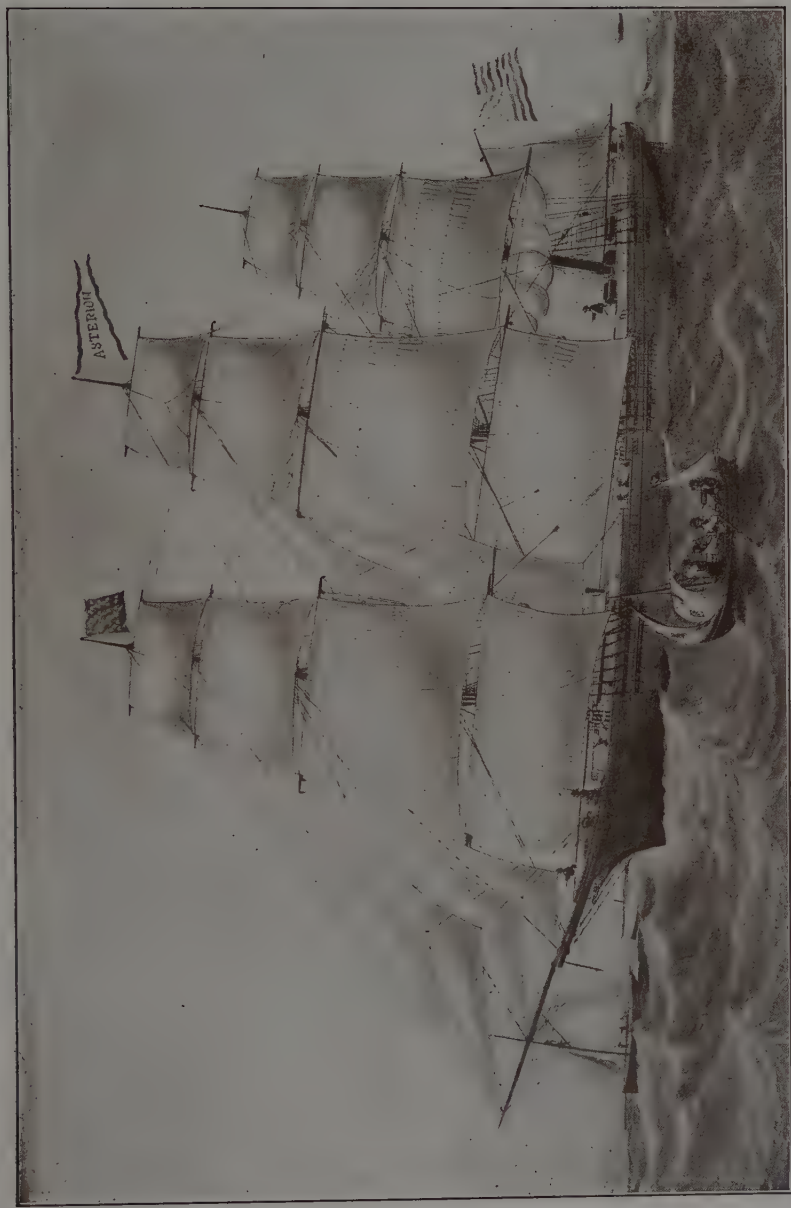
[328] SHIP "ARGONAUT" OF BOSTON. 570 TONS. BUILT AT MEDFORD IN 1849
From a painting by a Chinese artist.



[329] SLOOP-OF-WAR (BRIG) "ARGUS, 20 GUNS, 125 MEN, BUILT IN BOSTON IN 1803
From a painting by Whitcombe, showing her capture August 14, 1813 by the British brig "Pelican", 21 guns.



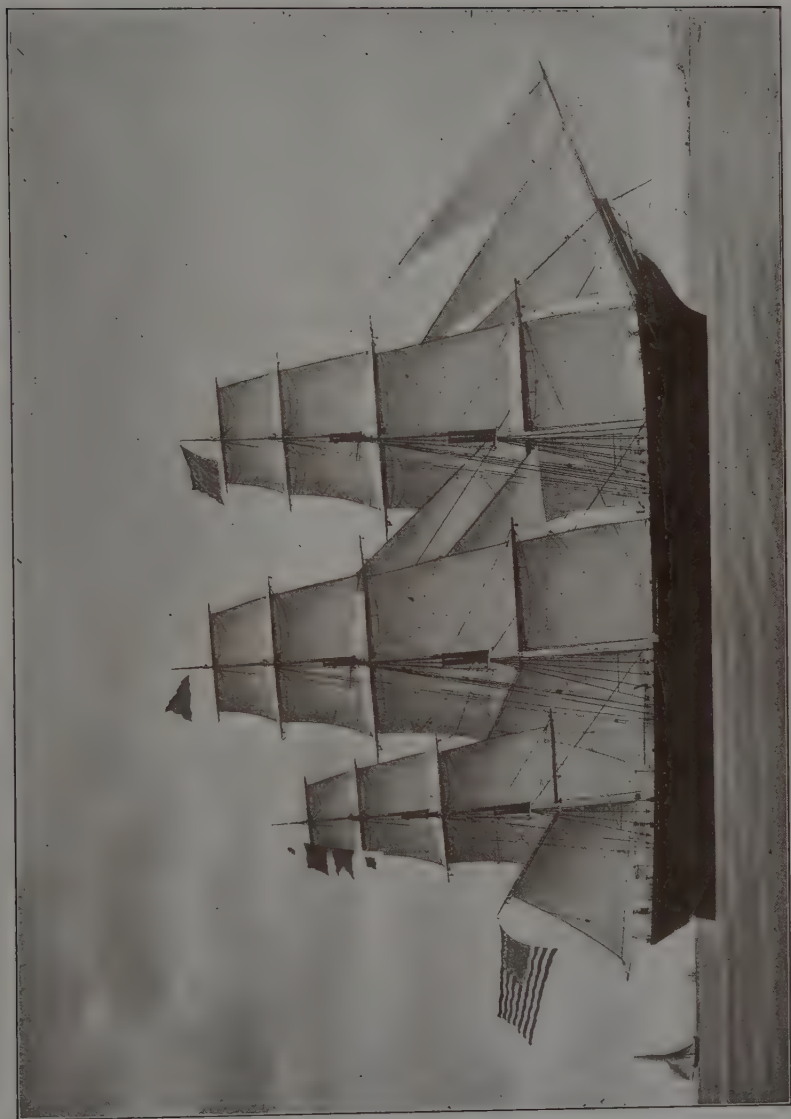
[330] SHIP "ARYAN" OF BATH, ME., 2123 TONS, BUILT AT PHILLIPSBURG, ME. IN 1893
The last of the wooden clippers in the United States. From a photograph showing her off the California coast in 1919.



[331] SHIP "ASTERION" OF NEW YORK, 1135 TONS, BUILT AT MEDFORD IN 1854



[332] SHIP "AUGUSTA" OF NEWBURYPORT, 1326 TONS, BUILT AT NEWBURYPORT IN 1868
Copy, by George E. Noyes, Newburyport, of a photograph taken at Calcutta in 1870.



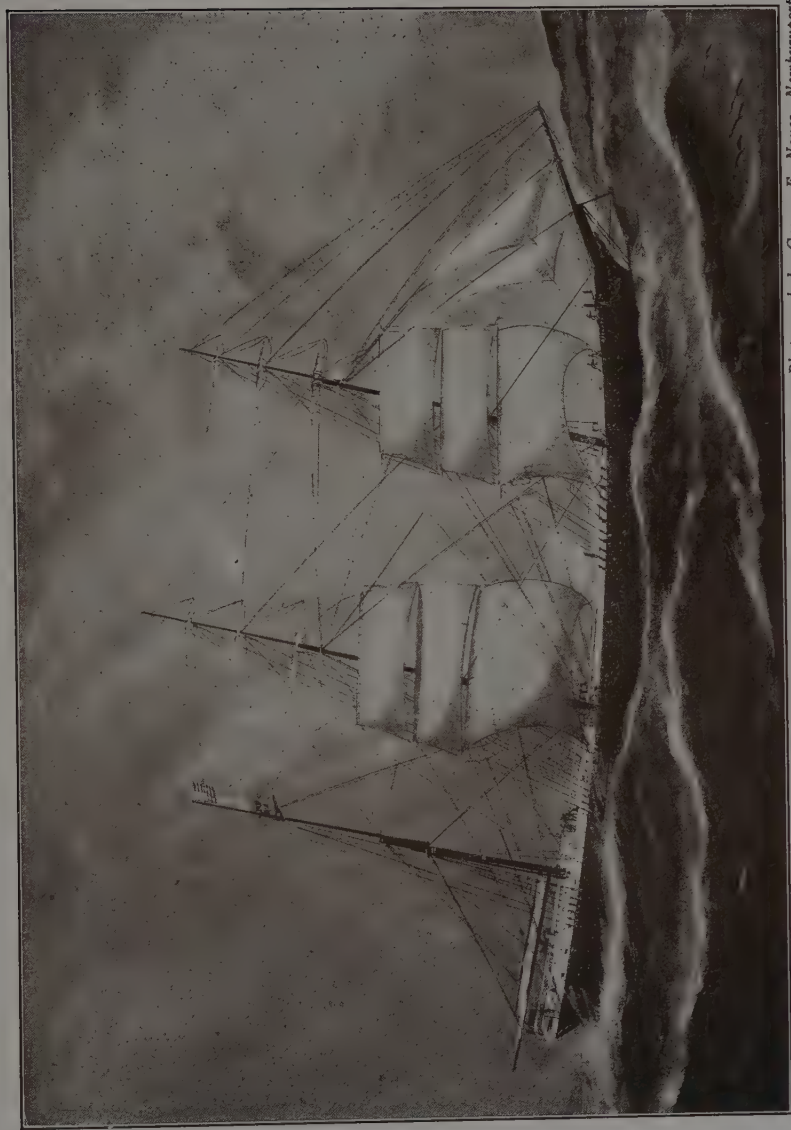
[333] SHIP "AUSTRALIA" OF SALEM, 534 TONS, BUILT AT MEDFORD IN 1849
From a painting by Domenico Gavarrone made at Genoa, July 2, 1861.



[334] SHIP "BARNABAS WEBB" OF THOMASTON, ME., 1299 TONS, BUILT
AT THOMASTON, ME., IN 1856

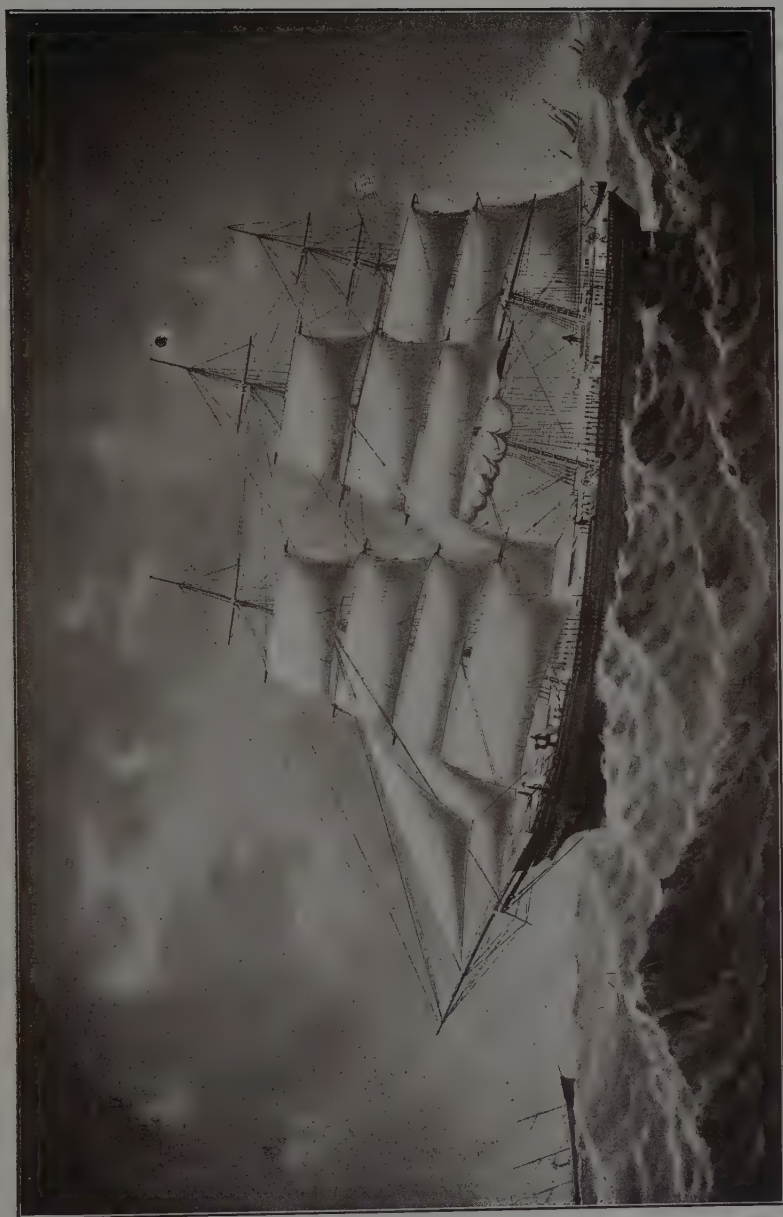


[335] BARK "BERTHA" OF NEW BEDFORD, 437 TONS, BUILT AT NEW
BEDFORD IN 1878

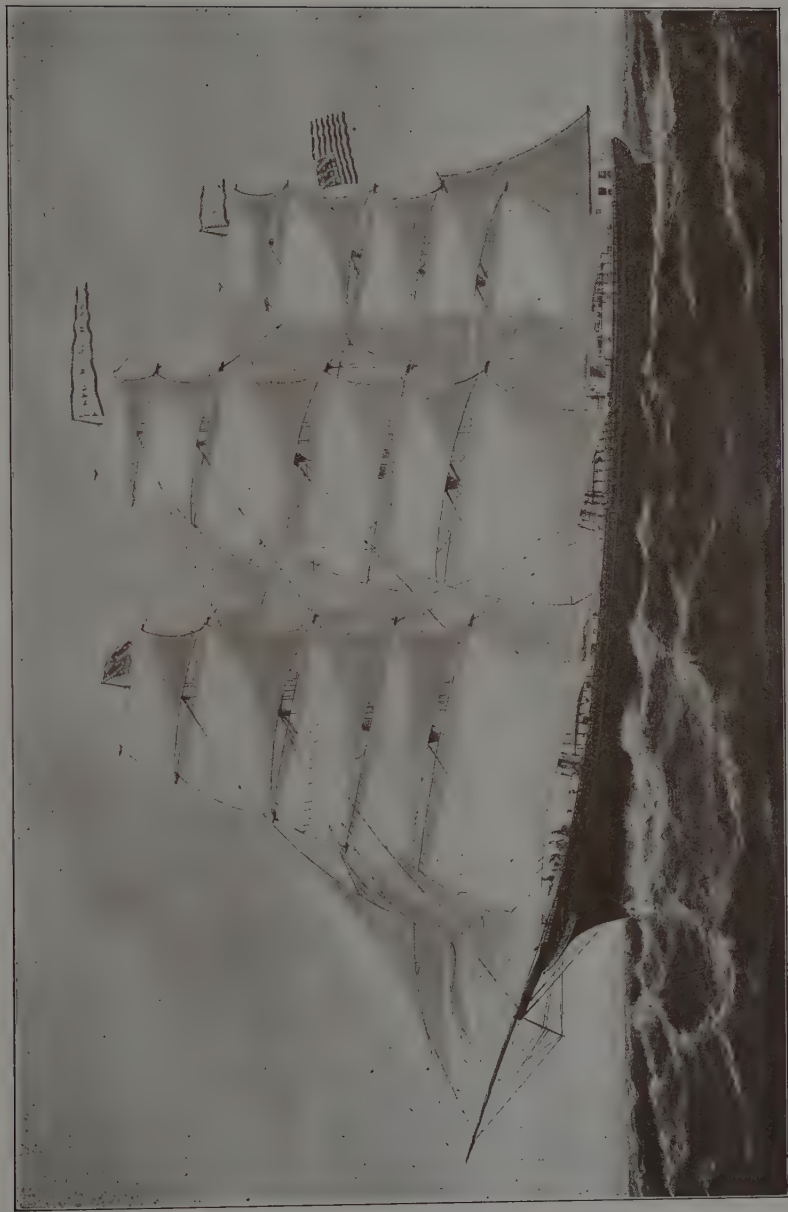


Photograph by George E. Noyes, Newburyport

[336] CLIPPER-BARK "BENJAMIN F. HUNT, JR." OF NEWBURYPORT, 1100 TONS, BUILT AT NEWBURYPORT IN 1881
From an oil painting by G. F. Gregory, 1887.



[337] PACKET-SHIP "BRIDGEWATER" OF NEW YORK, 1557 TONS, BUILT AT PHILADELPHIA, PA. IN 1855
In 1873-1878, owned in part in Salem. From an oil painting by B. P. Yorke, 57 Elton St., Brooklyn, N. Y.



[338] SHIP "BROWN BROTHERS" OF BOSTON, 11492 TONS, BUILT AT NEWBURYPORT IN 1876



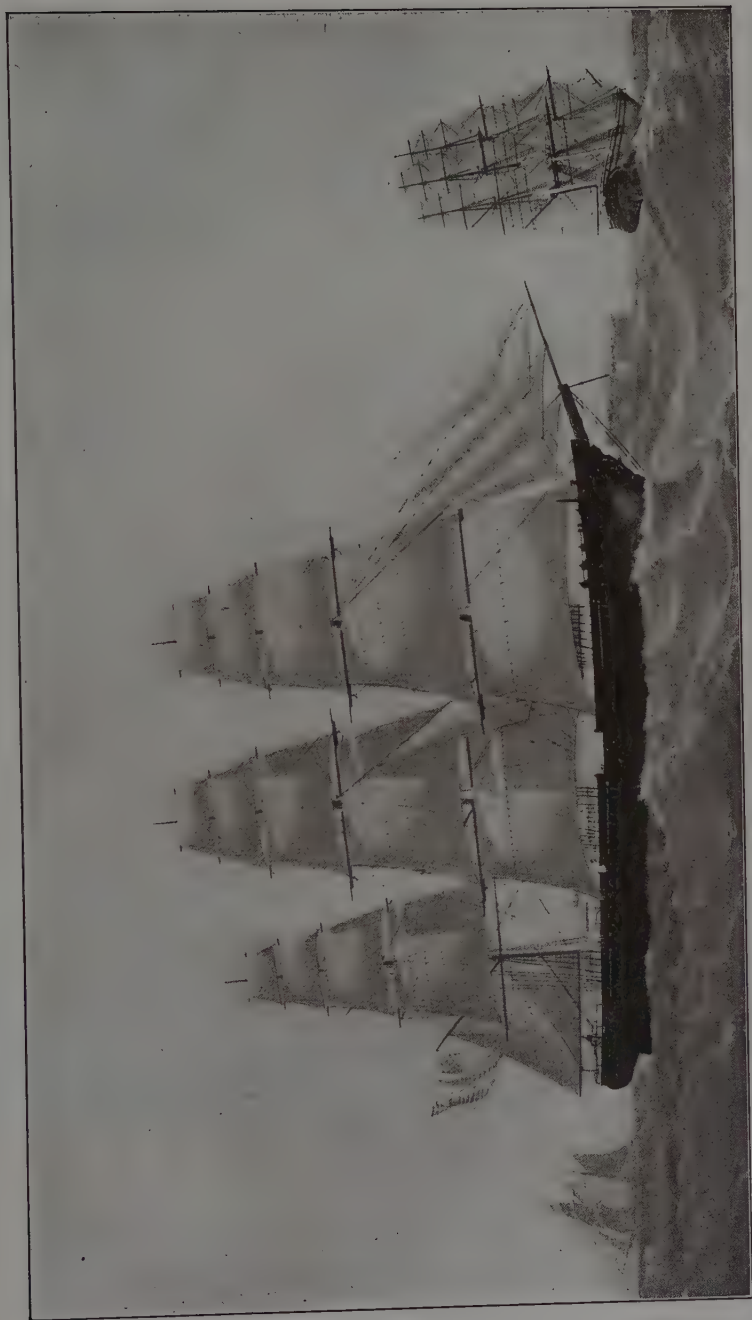
[339] SHIP "BONITA" OF BOSTON, 1127 TONS, BUILT AT BOSTON IN 1853



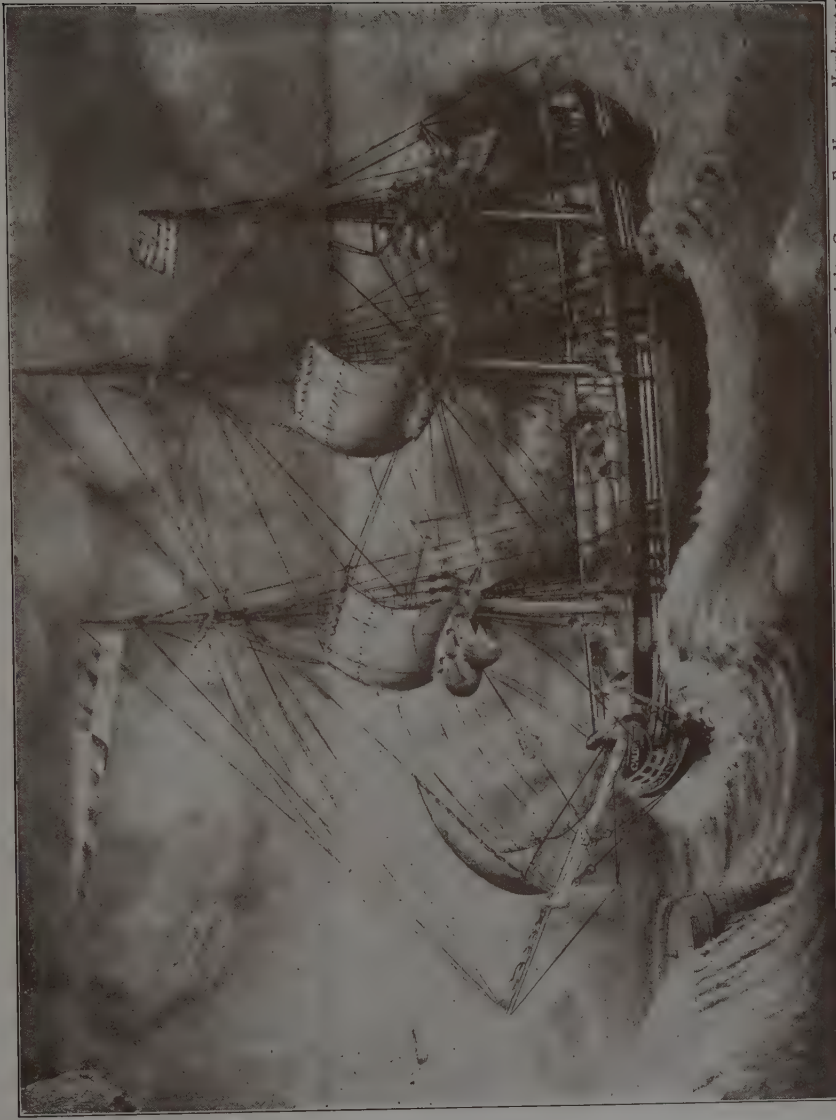
[340] SHIP "BOSTON" OF BOSTON, 640 TONS, BUILT AT MEDFORD IN 1846



[341] BARKENTINE "BRUCE HAWKINS" OF BOSTON, 614 TONS, BUILT AT
EAST BOSTON IN 1889

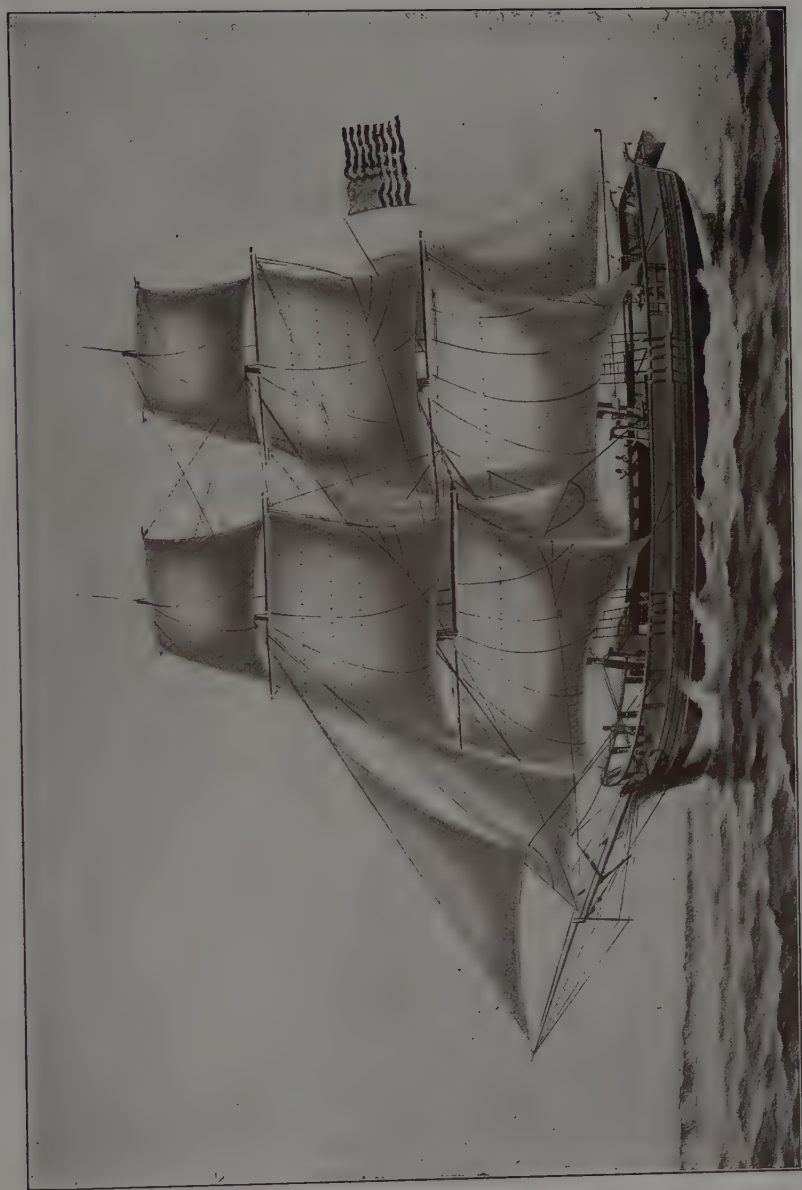


[342] SHIP "BOSTONIAN" OF BOSTON, 1089 TONS, BUILT AT EAST BOSTON IN 1854
From an oil painting by B. Tindall, London.



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[343] SHIP "CALUMET" OF NEWBURYPORT, 318 TONS, BUILT AT SALISBURY IN 1826
From a watercolor showing the ship entering the port of Havre, March 2, 1827.



[344] BRIG "CAMEL" OF SALEM, 117 TONS, CAPTURED FROM THE BRITISH IN 1814
From an oil painting by Charles Torrey of Brookline, Mass., after the model at the Peabody Museum, Salem.



[345] WHALING BARK "CANTON" OF NEW BEDFORD, 238 TONS, BUILT AT BALTIMORE, MD. IN 1835



Photograph by George E. Noyes, Newburyport

[346] SHIP "CARAVAN" OF NEWBURYPORT, 330 TONS, BUILT AT NEWBURY
IN 1832



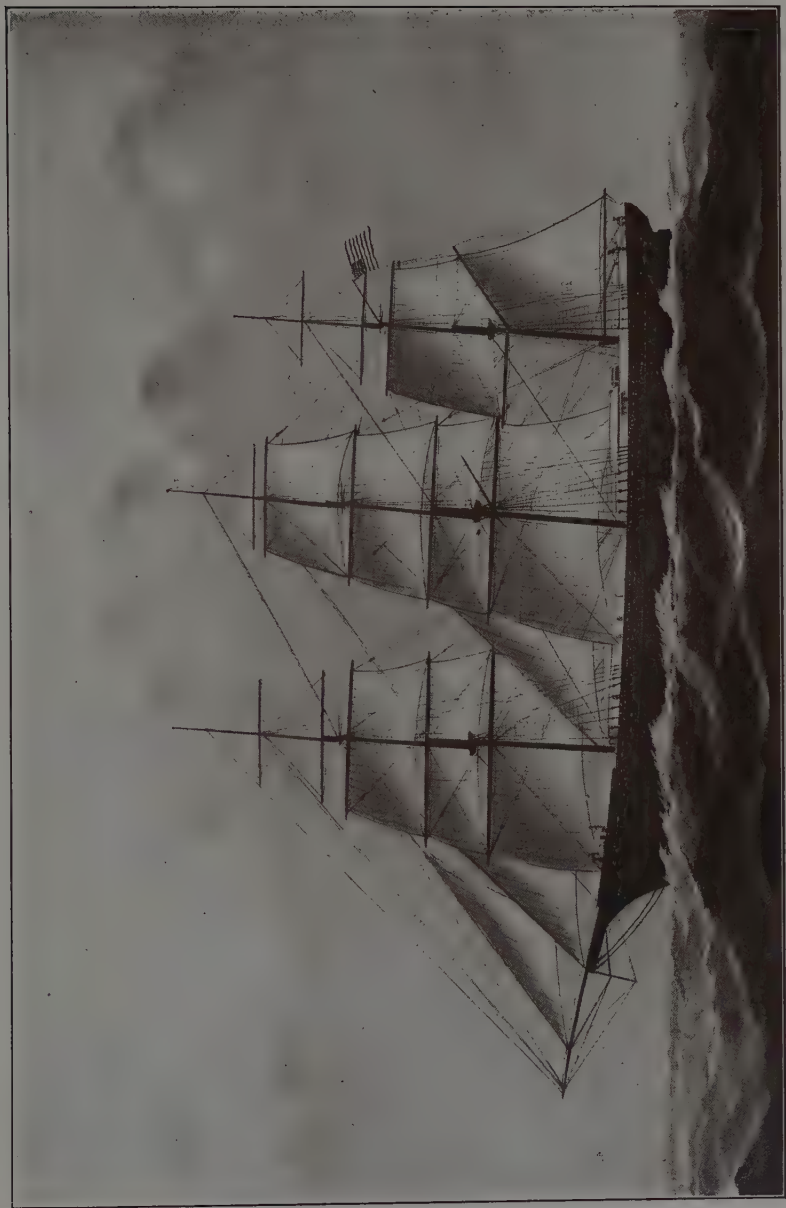
Photograph by George E. Noyes, Newburyport

[347] SCHOONER "CHARLES C. DAME" OF NEWBURYPORT, 576 TONS, BUILT
AT NEWBURYPORT IN 1882



Photograph by George E. Noyes, Newburyport

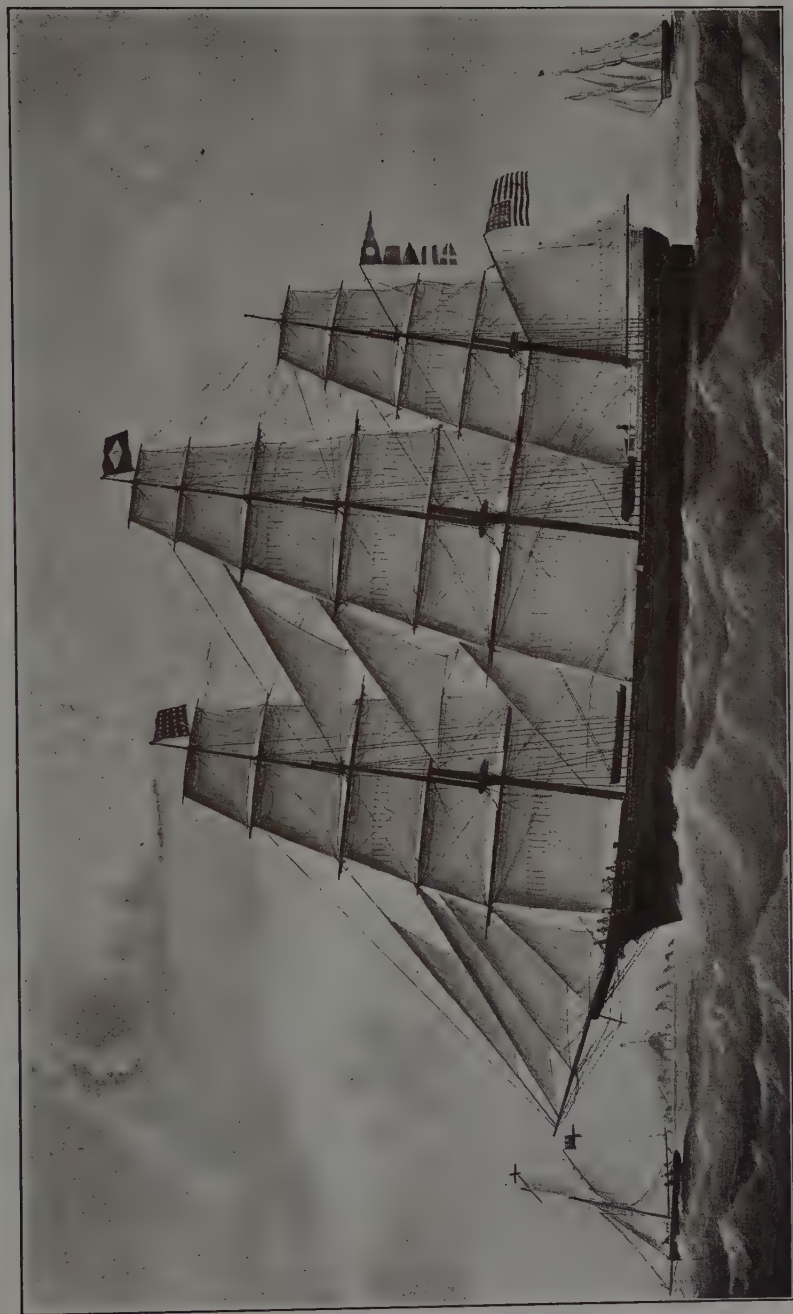
[348] SHIP "CARRIE REED" OF BOSTON, 1400 TONS, BUILT AT KENNEBUNKPORT, ME. IN 1870
Sold to German owners in 1876 and name changed to "Gustav and Oscar". From an oil painting by C. J. Waldron.



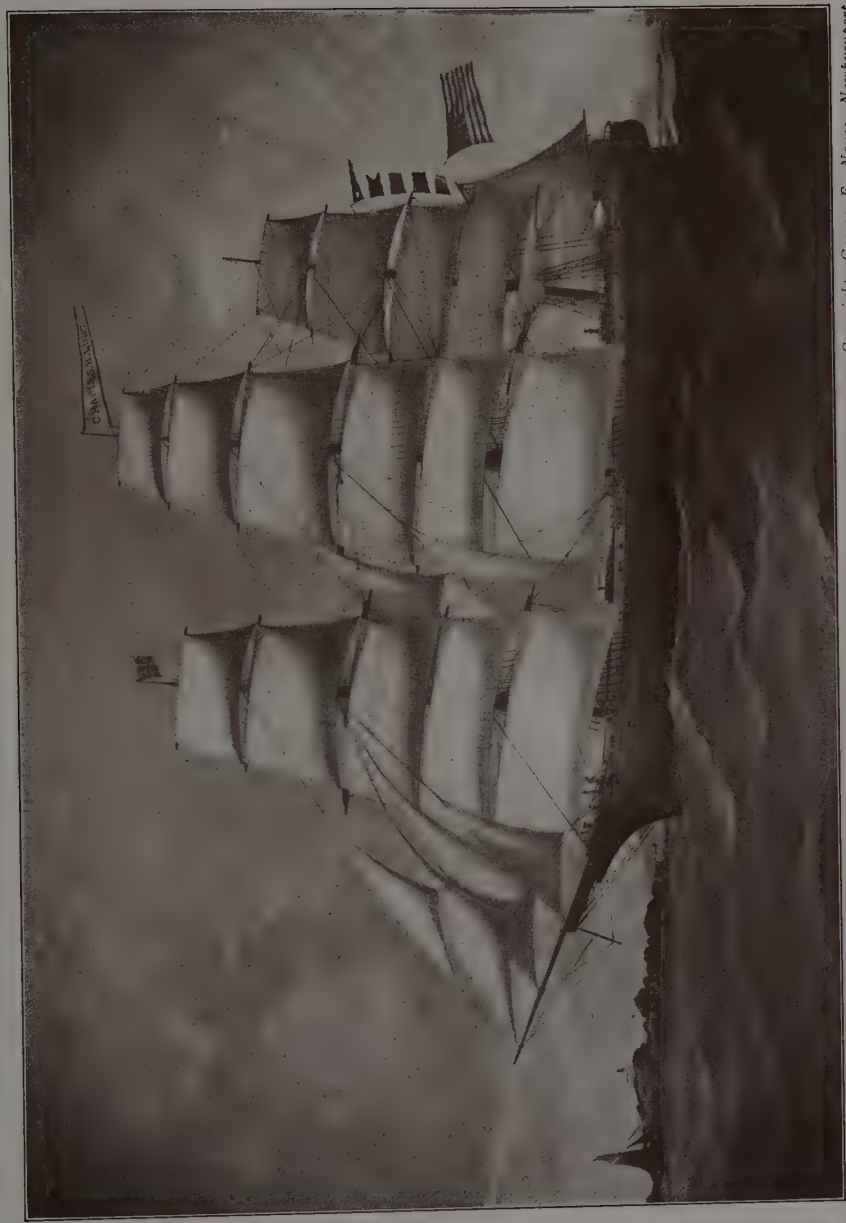
[349] SHIP "CASHMERE" OF BOSTON, 937 TONS, BUILT AT MEDFORD IN 1869



[350] SHIP "CASIMERE" OF BOSTON, 937 TONS, BUILT AT MEDFORD IN 1869
From an oil painting showing her in a storm.



[351] SHIP "CHARIOT OF FAME" OF NEW YORK, 2050 TONS, BUILT AT EAST BOSTON IN 1853
A medium clipper built by Donald McKay for the White Star Packet Line.



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1352] SHIP "CHARLES H. LUNT" OF NEWBURYPORT, 997 TONS, BUILT AT NEWBURYPORT IN 1859



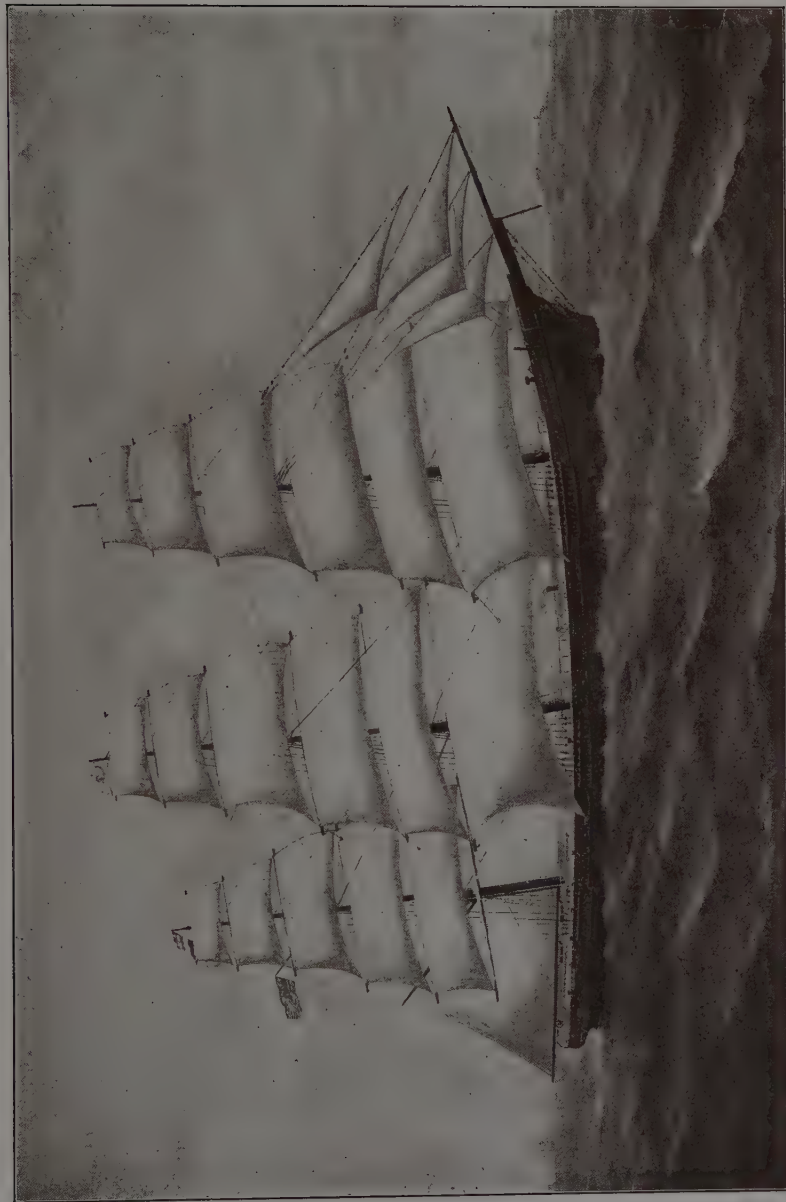
[353] WHALING SHIP "CHARLES W. MORGAN" OF NEW BEDFORD, 314 TONS,
BUILT AT NEW BEDFORD IN 1841; ALSO THE BRIG "LENORA"
OF NEW BEDFORD.



[354] SHIP "COLUMBIANA" OF BOSTON, 630 TONS, BUILT AT MEDFORD IN 1837



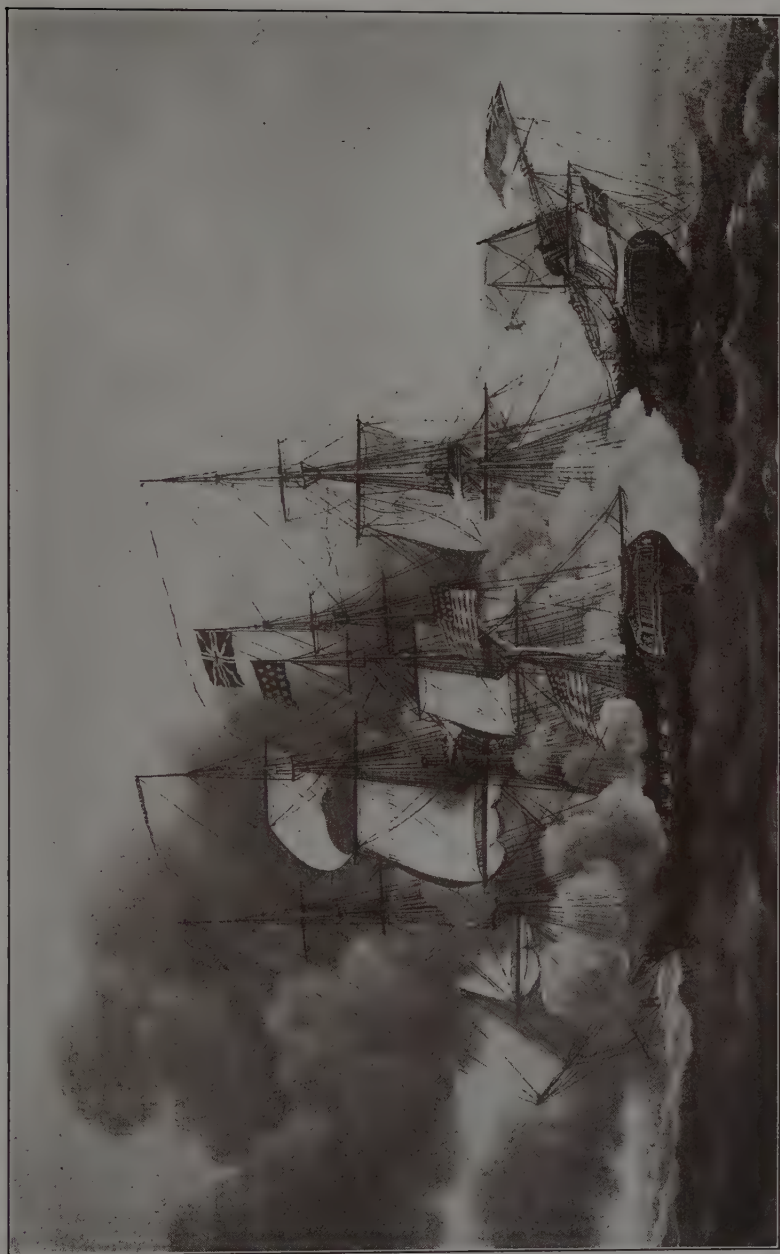
[355] SHIP "CYRUS WAKEFIELD" OF THOMASTON, ME., 2118 TONS, BUILT
AT THOMASTON, MAINE, IN 1882
From an oil painting by B. P. Yorke, 1894.



[356] SHIP "COLUMBUS" OF NEW YORK, 597 TONS. BUILT AT NEWBURYPORT IN 1836
A "Black Ball" liner, that made the passage from New York to Liverpool in 16 days.



[357] FRIGATE "CONSTITUTION" ESCAPING FROM A BRITISH FLEET, JULY 18, 1812
From a painting on copper by J. Font, Port Mahon, Minorca.



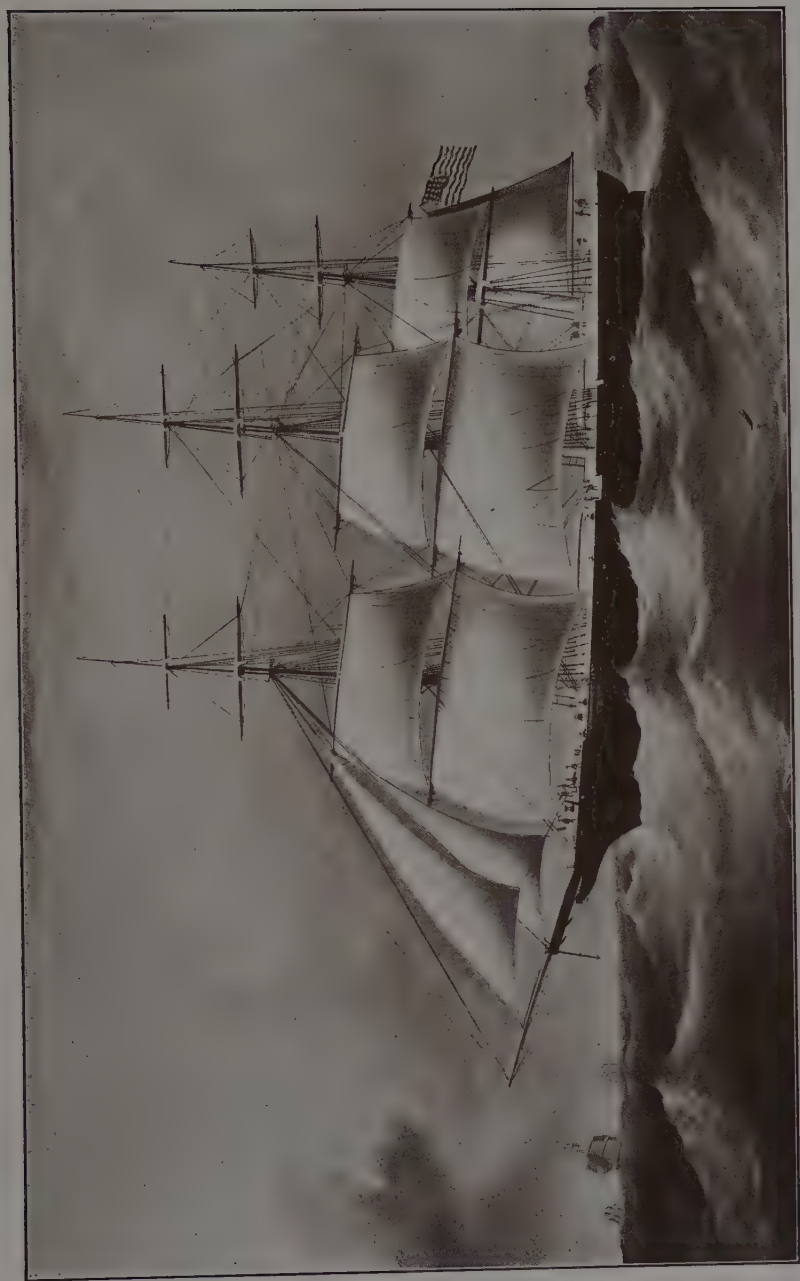
[358] FRIGATE "CONSTITUTION" ENGAGING H.M.S. "GUERRIERE"
From a painting by Thomas Birch at the Naval Academy, Annapolis,



[359] FRIGATE "CONSTITUTION" READY FOR LAUNCHING, MAY 27, 1858, AFTER REPAIRS AT PORTSMOUTH, N H.



[360] FRIGATE "CONSTITUTION"
LYING AT THE CHARLESTOWN NAVY YARD, MAY 1, 1924

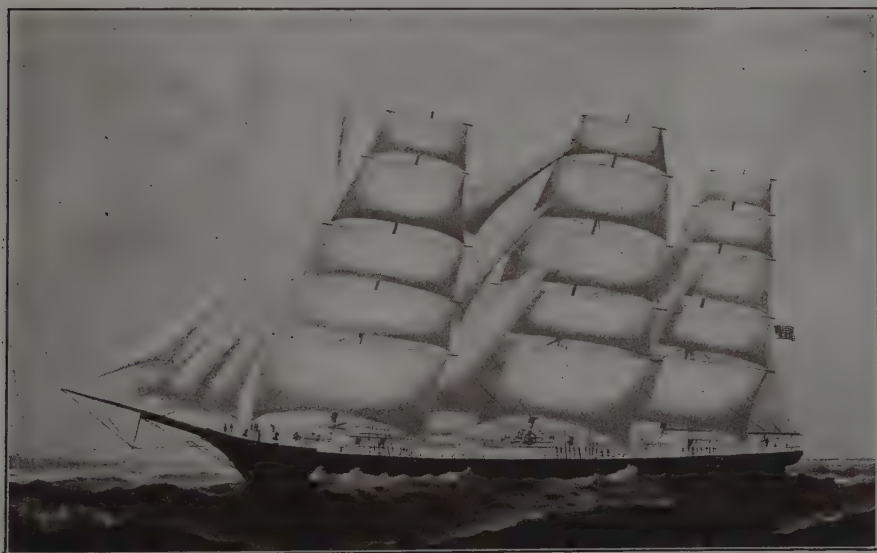


[361] SHIP "COWPER" OF BOSTON, 1024 TONS, BUILT AT SOMERVILLE, MASS., IN 1854



Photograph by George E. Noyes, Newburyport

[362] SHIP "DANIEL I. TENNEY" OF NEWBURYPORT, 1687 TONS, BUILT AT
NEWBURYPORT IN 1875



[363] SHIP "DANIEL I. TENNEY" OF NEWBURYPORT, 1687 TONS, BUILT AT
NEWBURYPORT IN 1875

From an oil painting by Charles Torrey.



[364] SHIP "DANIEL I. TENNEY" OF NEWBURYPORT, 1687 TONS, BUILT AT
NEWBURYPORT IN 1875

View on deck looking forward as she lay at the wharf in Newburyport in 1875.



[365] SHIP "DANIEL I. TENNEY" OF NEWBURYPORT, 1687 TONS, BUILT AT
NEWBURYPORT IN 1875

View on deck looking aft as she lay at the wharf in Newburyport in 1875.

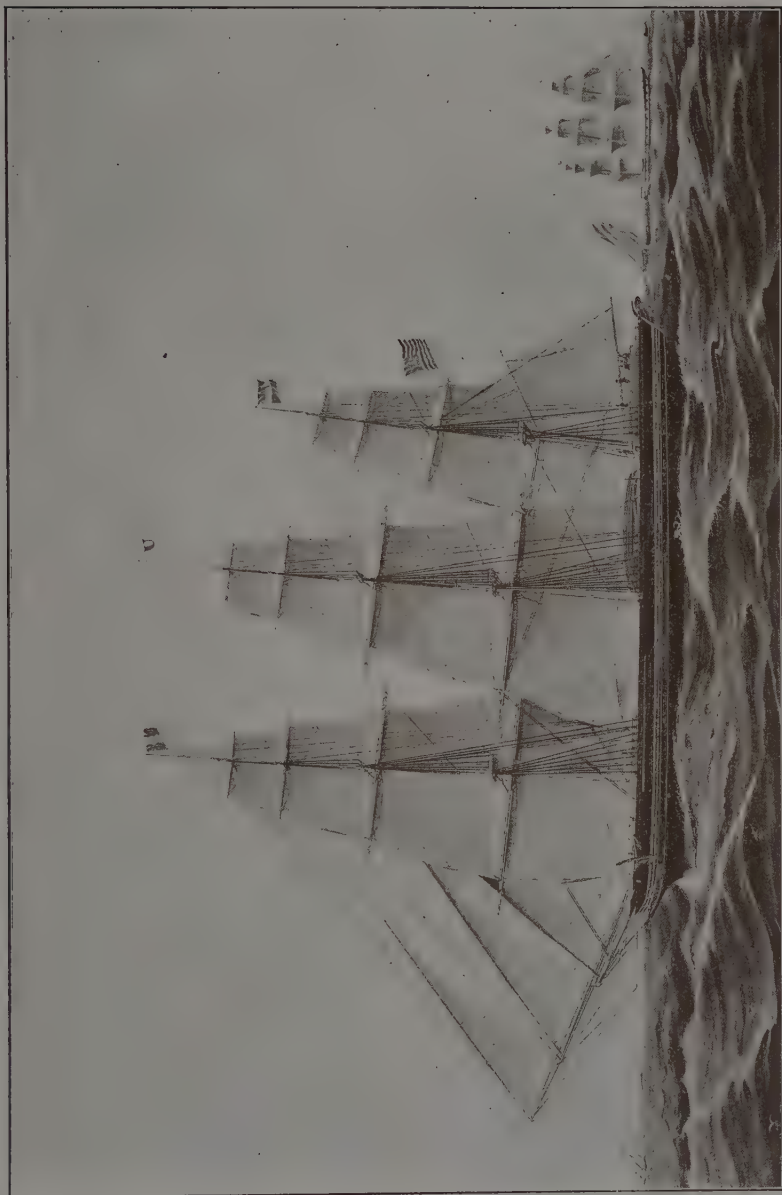


[366] CLIPPER SHIP "DONALD MCKAY" OF BOSTON, 2598 TONS, BUILT AT EAST BOSTON IN 1854
From an oil painting showing her narrow escape from shipwreck.



[367] SHIP "DON QUIXOTE OF BOSTON, 1470 TONS, BUILT AT MEDFORD IN 1853

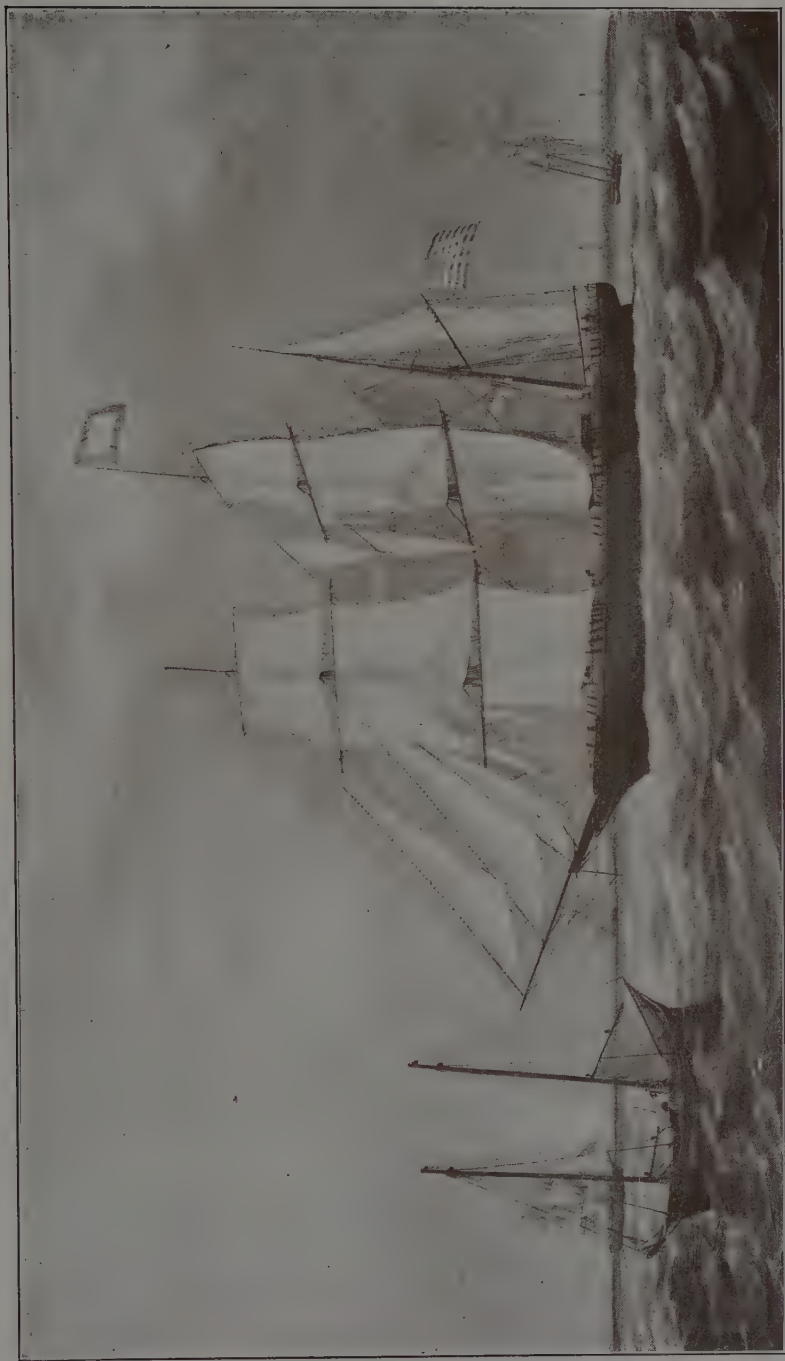
From a copy of a daguerreotype showing her on the stocks.



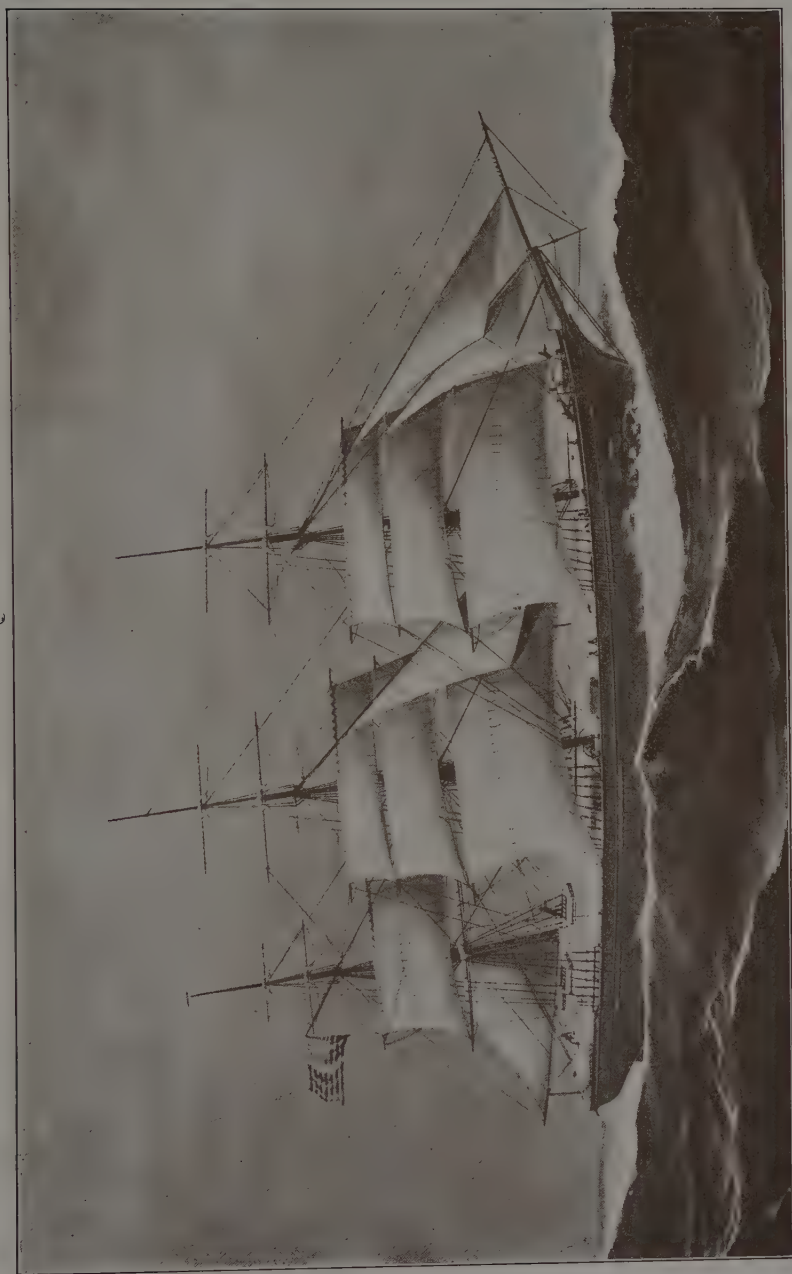
[368] SHIP "DUCHESS D'ORLEANS" OF NEW YORK, 799 TONS, BUILT AT NEW YORK IN 1838
Sailed in the Union Packet line between New York and Havre. Commanded by Capt. Addison Richardson of Salem. From a painting
by I. F. Hoge, Bridgeport, Conn., 1845.



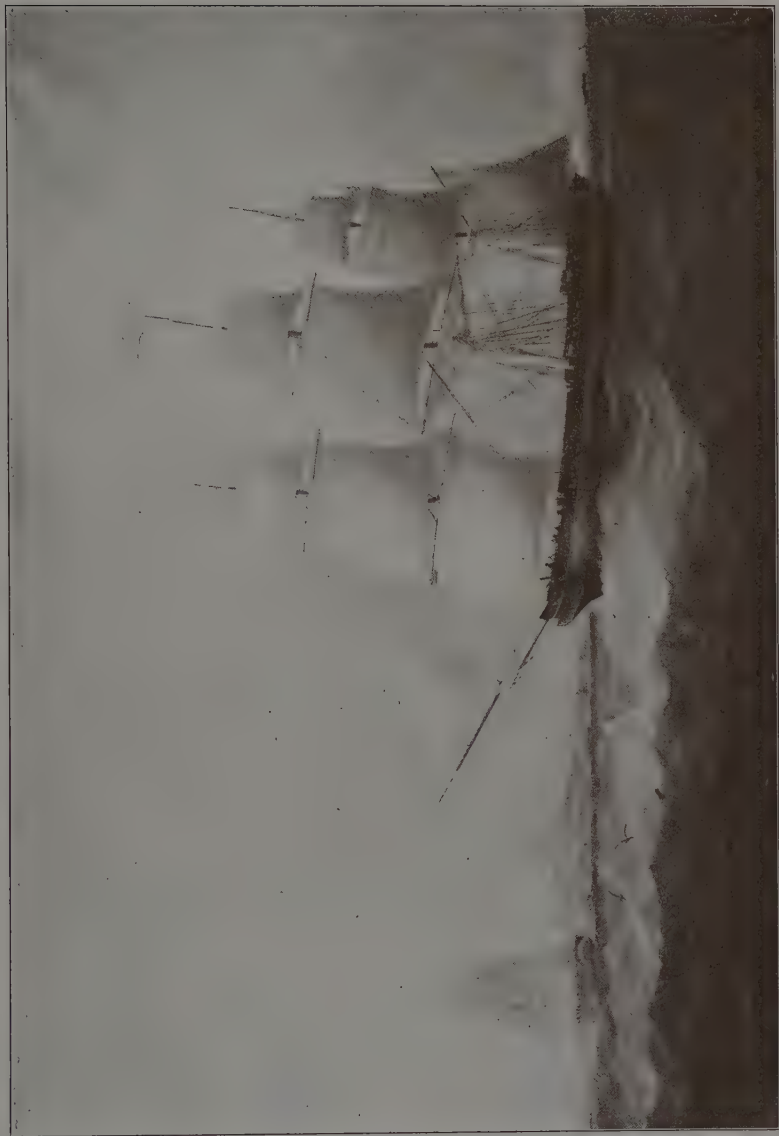
[369] PINKIE "EAGLE" OF CASTINE, ME., 20 TONS, BUILT AT DUXBURY
IN 1854



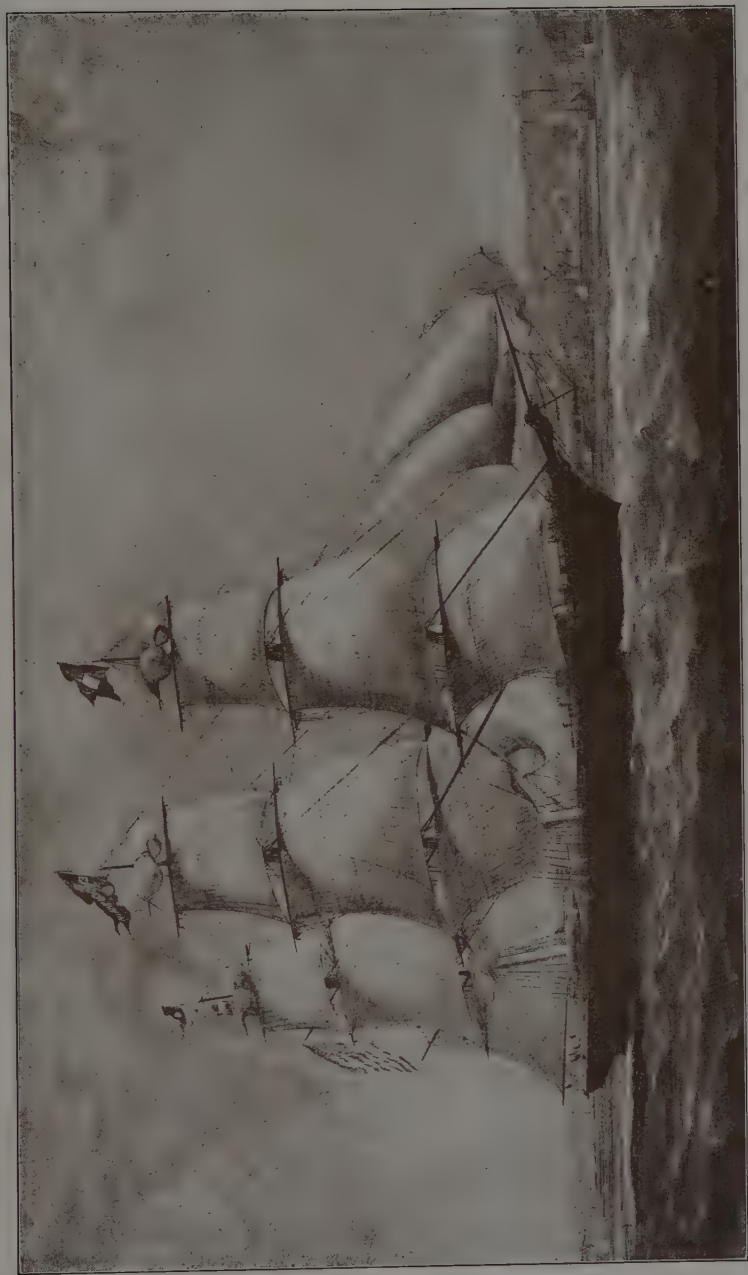
[370] BARK "EASTERN STAR" OF BOSTON, 378 TONS, BUILT AT ROBBINSON, ME. IN 1853
From an oil painting by F. H. Ta——.



[371] SHIP "ELIZABETH CUSHING" OF NEWBURYPORT, 888 TONS, BUILT AT NEWBURYPORT IN 1857



[372] SHIP "ELLEN BROOKS" OF BOSTON, 464 TONS, BUILT AT MEDFORD IN 1834
Condemned at Tahiti in 1853. From an oil painting done in Liverpool.



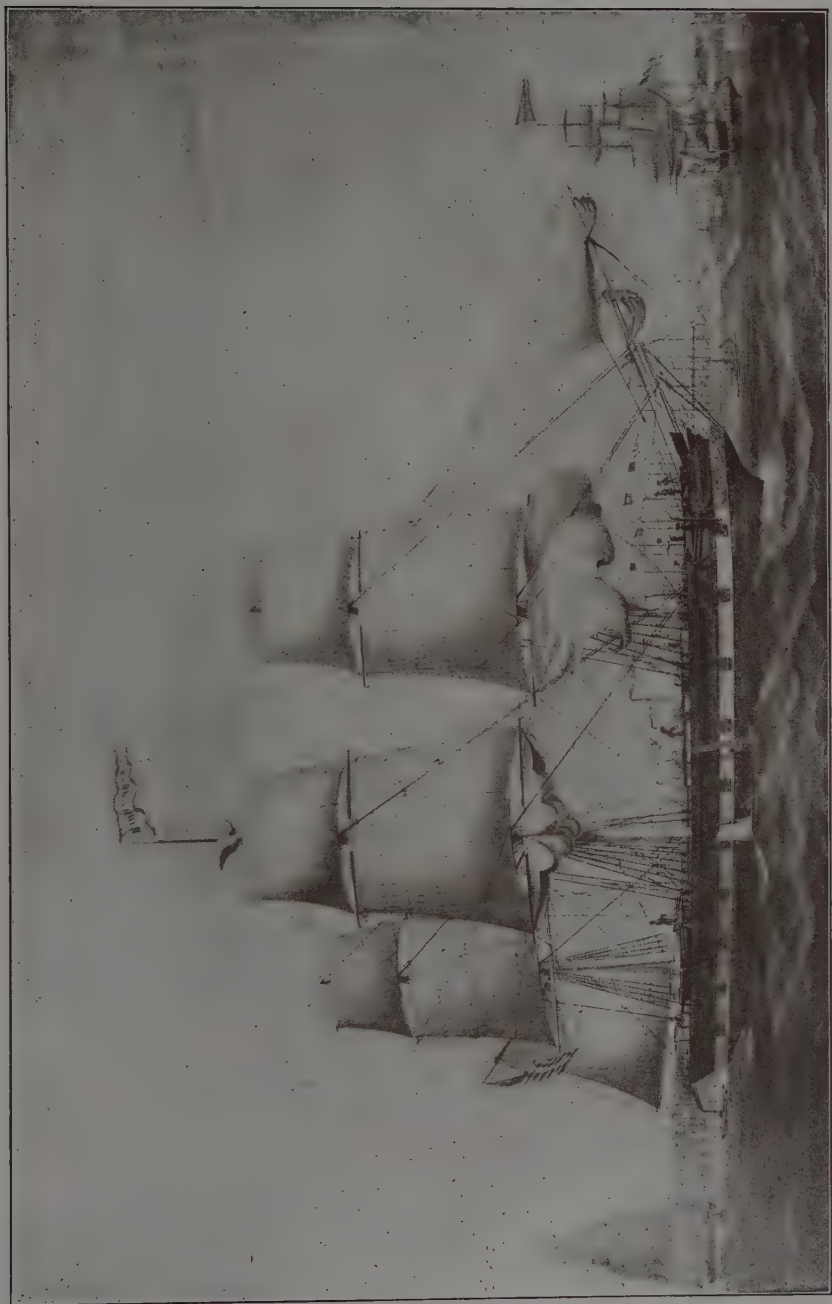
[373] SHIP "ENOCH TRAIN" OF BOSTON, 1617 TONS, BUILT AT EAST BOSTON IN 1854



[374] FRIGATE "ESSEX", 860 TONS, BUILT AT SALEM IN 1799
From a watercolor made about 1803, now at the Peabody Museum, Salem.



[375] HERMAPHRODITE BRIG "EUGENE HALE" OF CALAIS, ME., 443 TONS, BUILT AT
PASSAMAQUODDY, ME. IN 1878
From a photograph by N. L. Stebbins.



Photograph by George E. Noyes, Newburyport

[376] SHIP "EUPHRASIA" OF NEWBURYPORT, 487 TONS, BUILT AT NEWBURYPORT IN 1842

From an oil painting by S. Walters, showing the ship entering Liverpool.



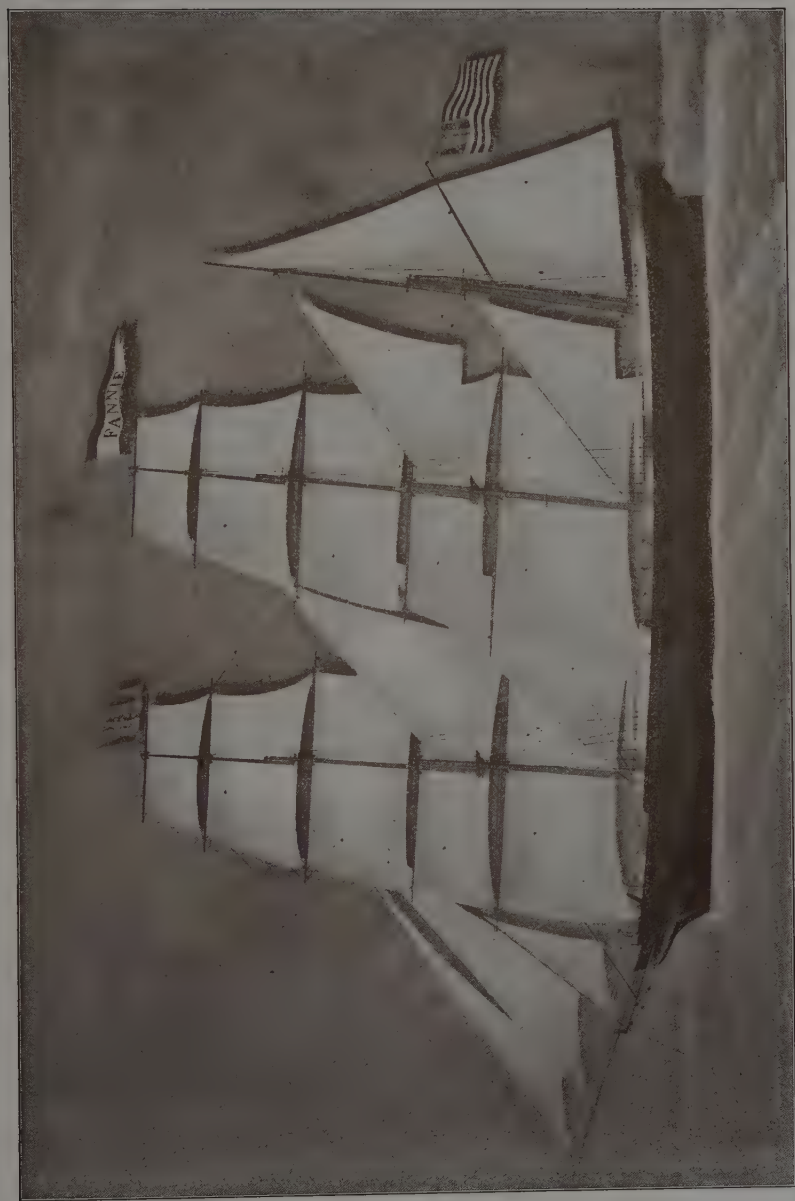
[377] SHIP "FAME" OF NEW BEDFORD
From a picture on a Staffordshire pitcher made 1800-1810.



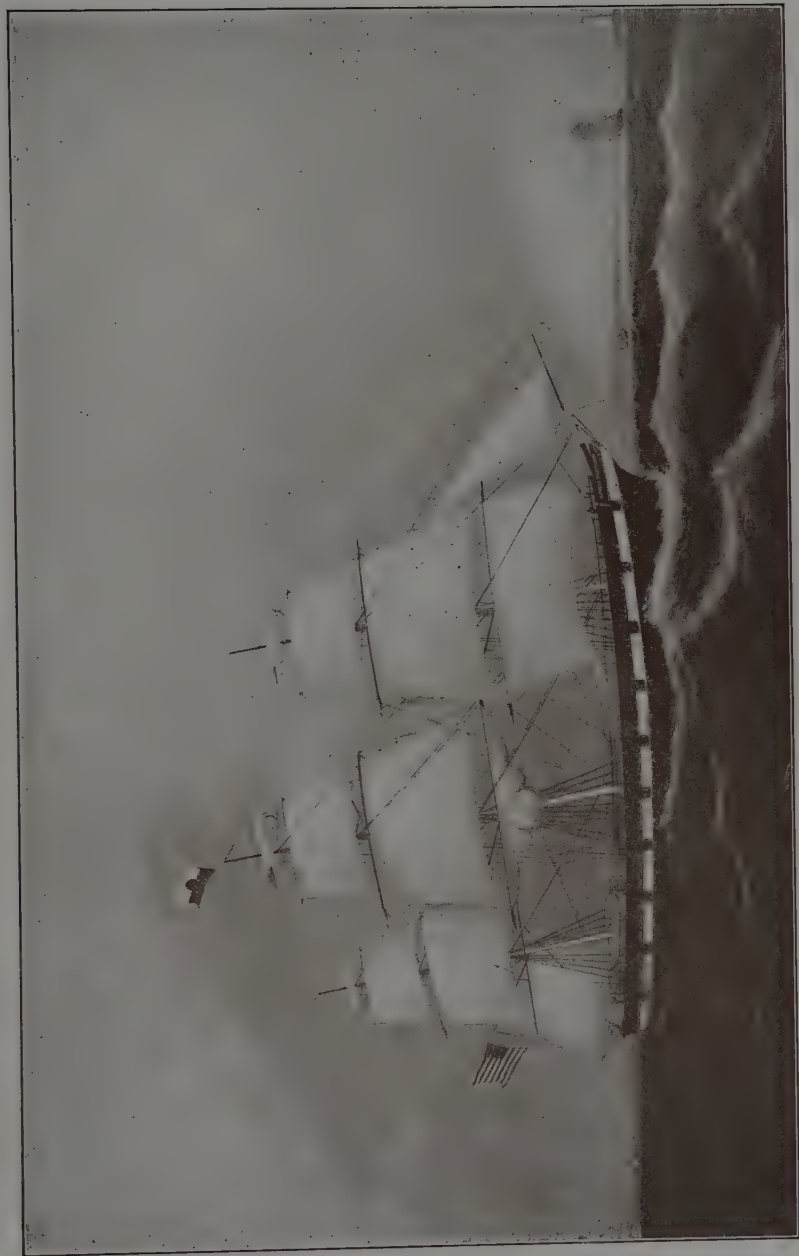
Copyright, George E. Noyes, Newburyport

[378] SHIP "FANCHON" OF NEWBURYPORT, 924 TONS, BUILT AT NEWBURYPORT IN 1847

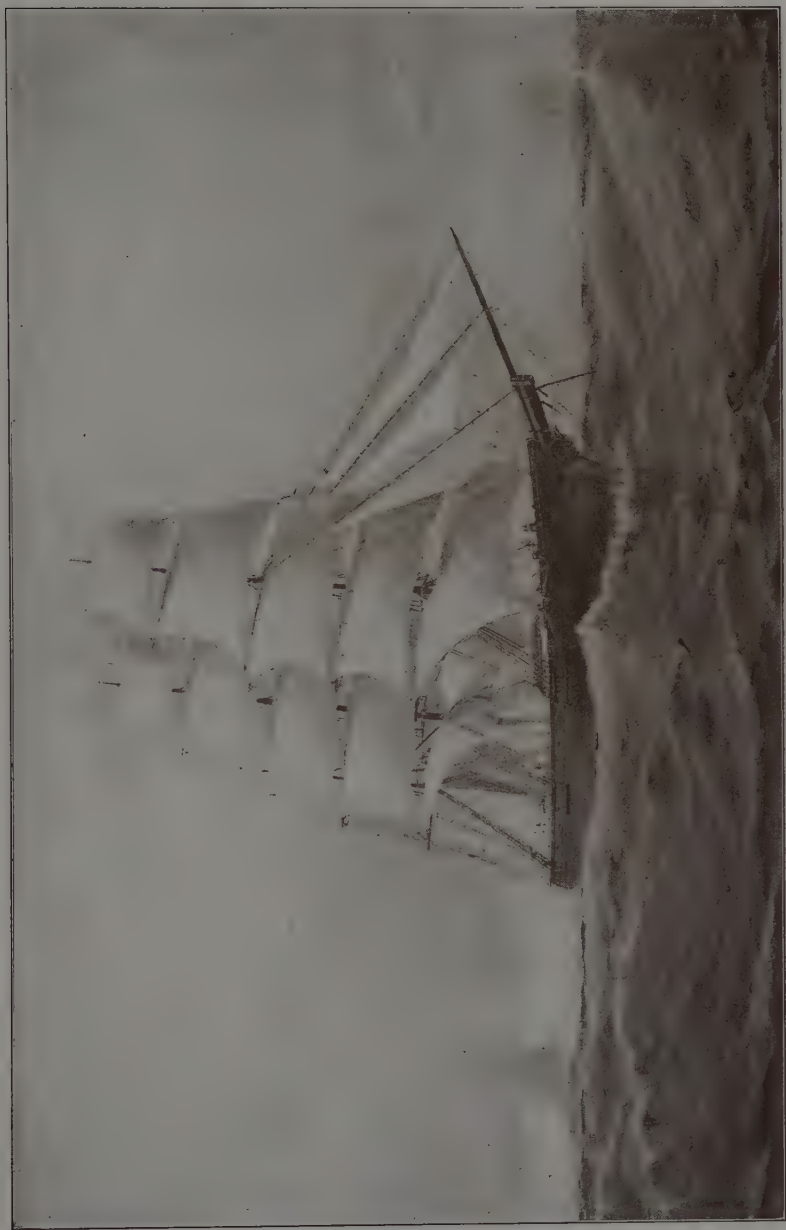
Burned at sea on the coast of Peru. From an oil painting by S. Walters, 1848, showing the ship coming into Liverpool.



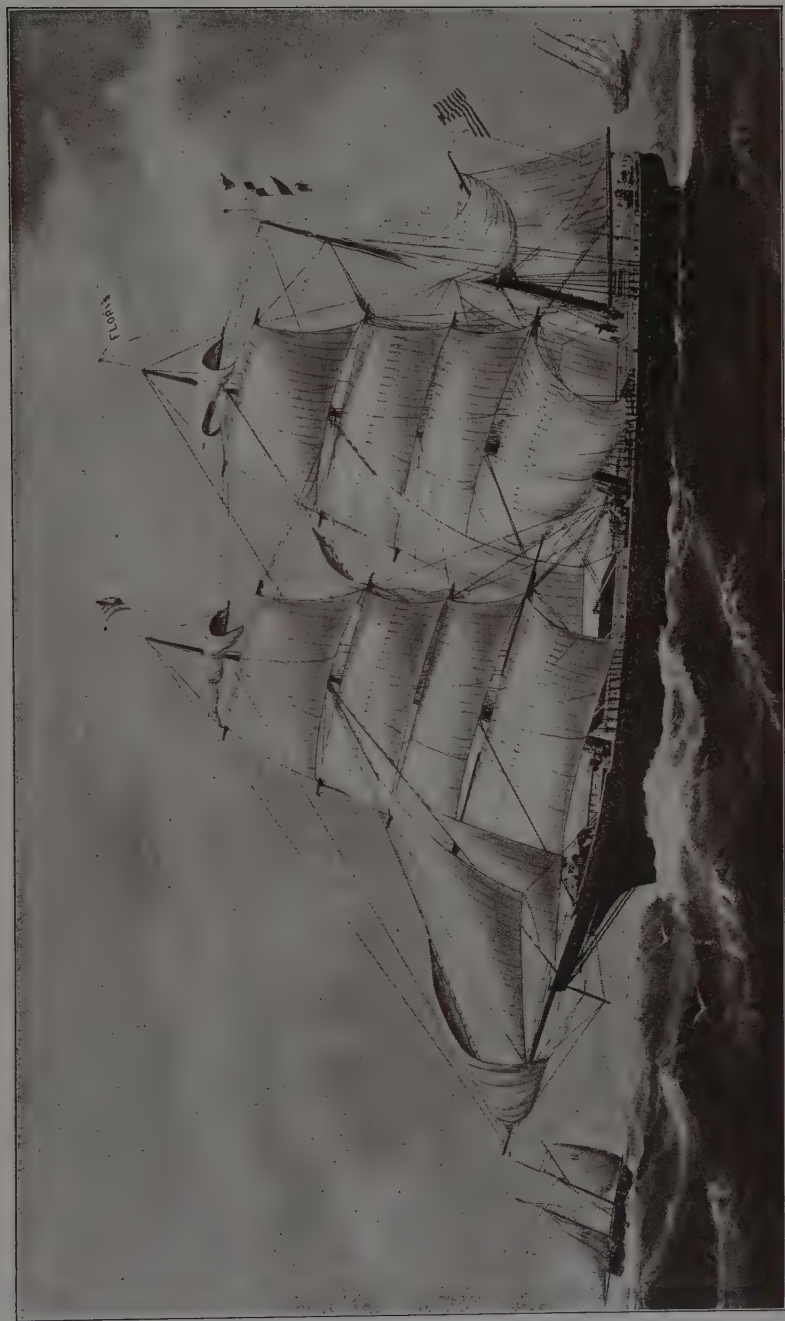
[379] BARK "FANNIE" OF SEARSPORT, ME., 400 TONS, BUILT AT SEARSPORT IN 1865



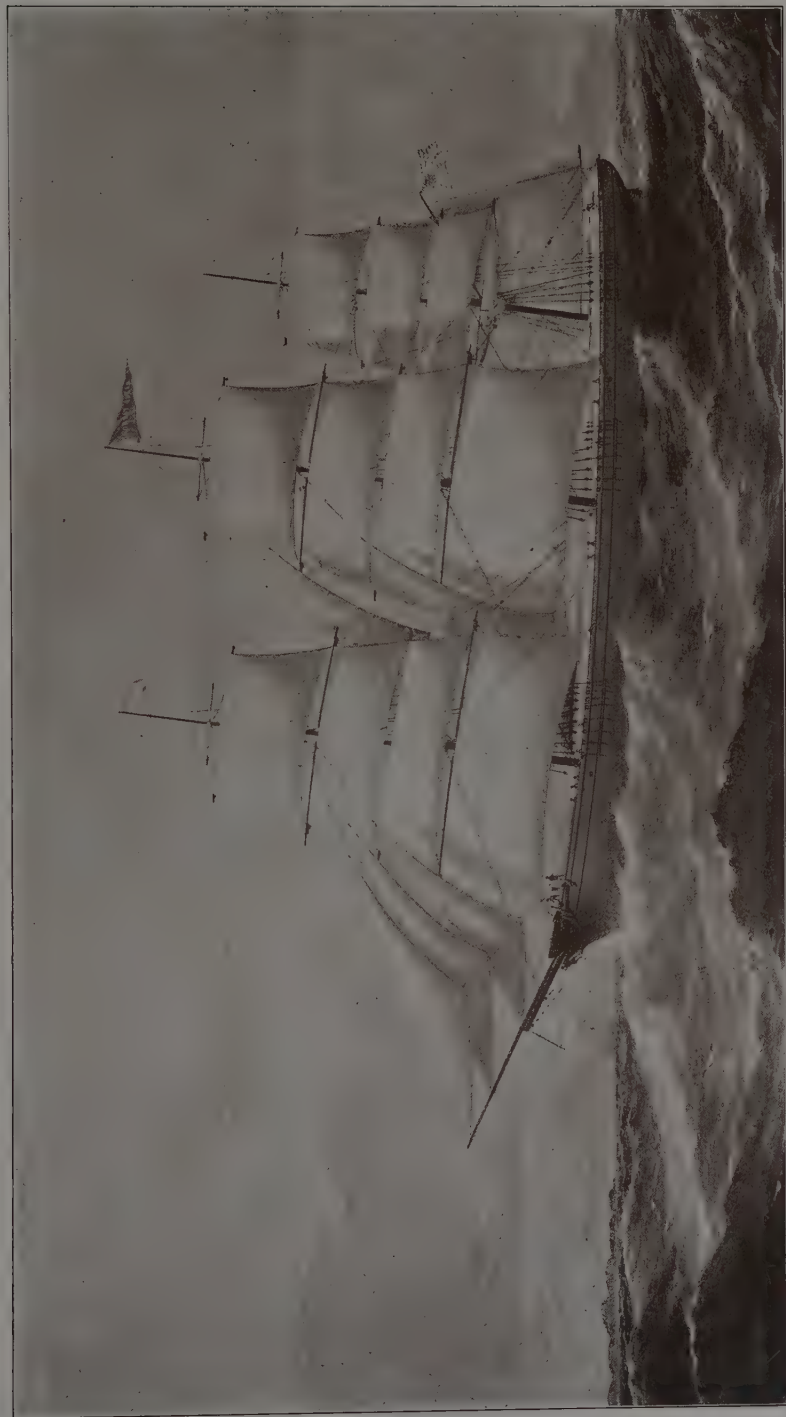
[380] SHIP "FANNY FORRESTER" OF NEW YORK, 624 TONS, BUILT AT DAMARISCOTTA, ME., IN 1847



[381] BARK "FANTEE" OF BOSTON, 652 TONS, BUILT AT DUXBURY IN 1869



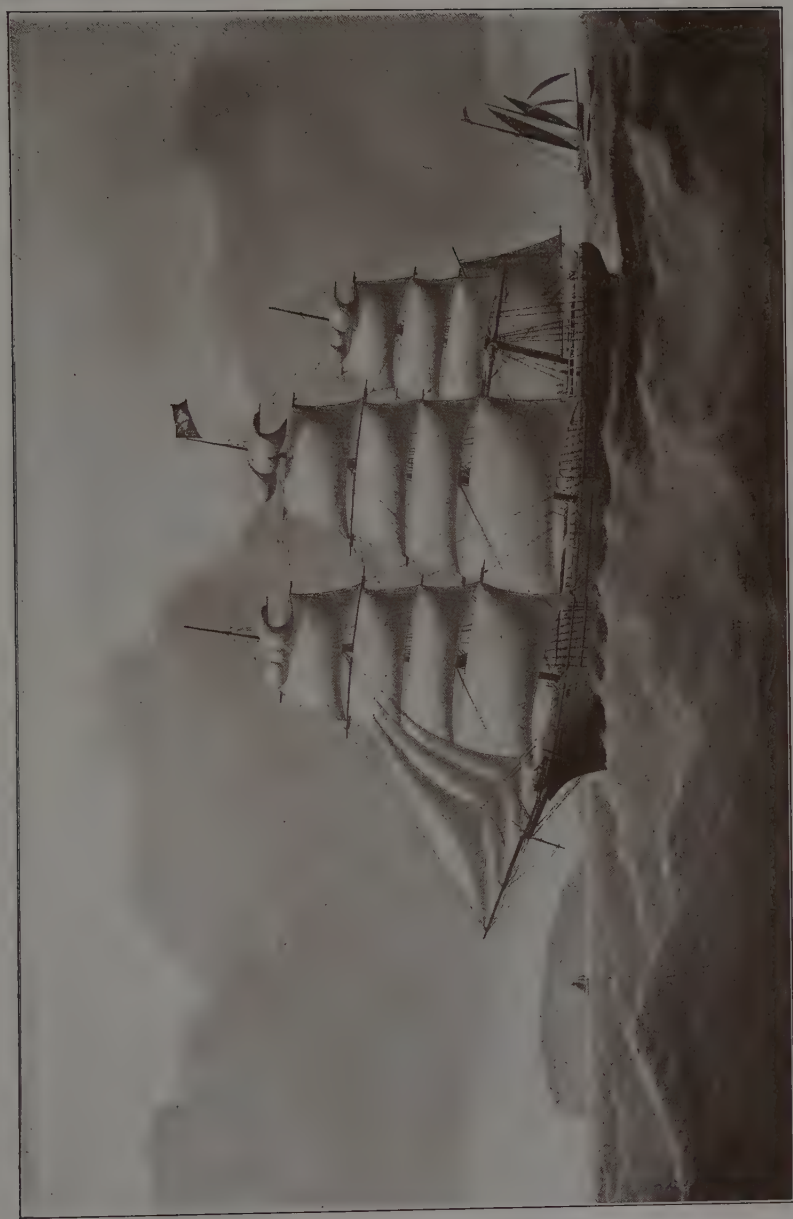
[382] BARK "FLORIS" OF BOSTON, 951 TONS, BUILT AT EAST BOSTON IN 1867



[383] SHIP "FOREST QUEEN" OF BOSTON, 593 TONS, BUILT AT ROCKLAND, ME. IN 1858



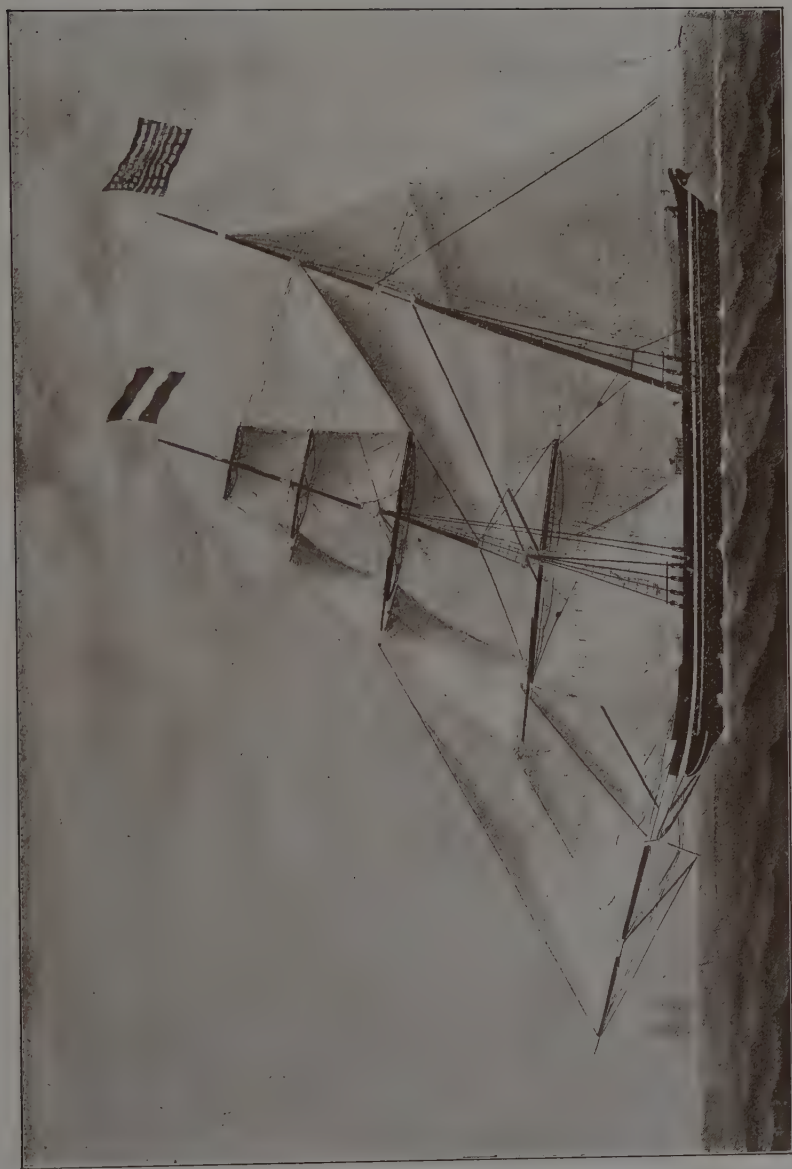
[384] SHIP "FORMOSA" OF SALEM, 1252 TONS, BUILT AT EAST BOSTON IN 1868
From a photograph made about 1873 showing her at a Boston wharf.



[385] SHIP "FRED WARREN" OF LIVERPOOL, ENG., 1043 TONS, BUILT AT EAST BOSTON IN 1863
From an oil painting by "J. H."



[386] FOUR-MASTED BARK "FREDERICK BILLINGS" OF CAMDEN, ME., 2497 TONS, BUILT AT CAMDEN, ME. IN 1885
From a photograph showing the launching.



[387] HERMAPHRODITE BRIG "GARLAND" OF SALEM, 148 TONS, BUILT AT BALTIMORE, MD. IN 1847
Lines oversharp to unseaworthiness; lost in a storm about 1850.



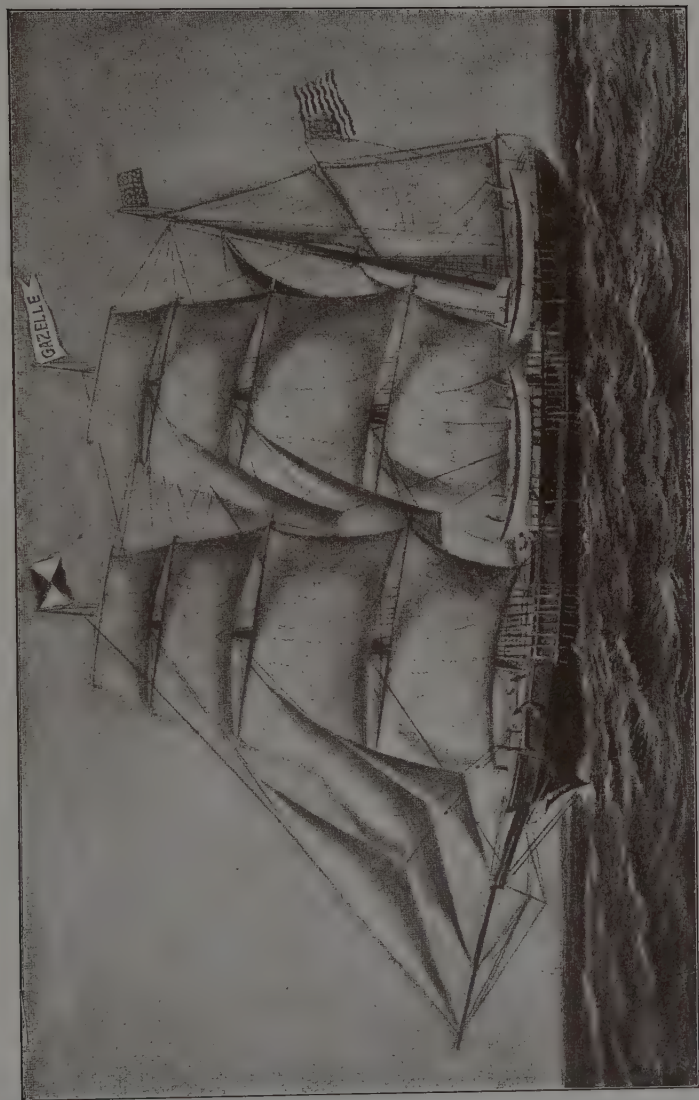
Photograph by George E. Noyes, Newburyport

[388] SCHOONER "GARLAND" OF NEWBURYPORT



Photograph by George E. Noyes, Newburyport

[389] BARK "GEORGE EATON WEBSTER" OF BOSTON, 354 TONS, BUILT AT
MEDFORD IN 1850

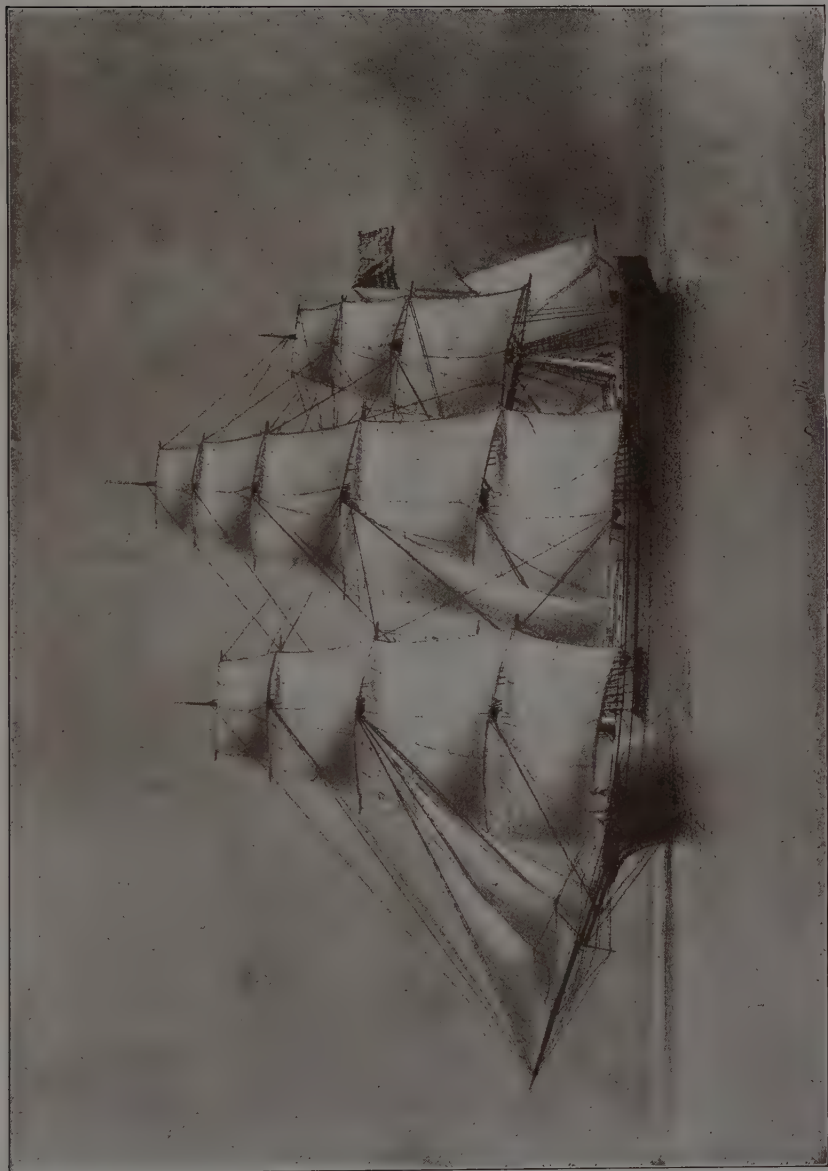


[390] WHALING BARK "GAZELLE" OF NEW BEDFORD, 340 TONS
Altered to a ship about 1856.



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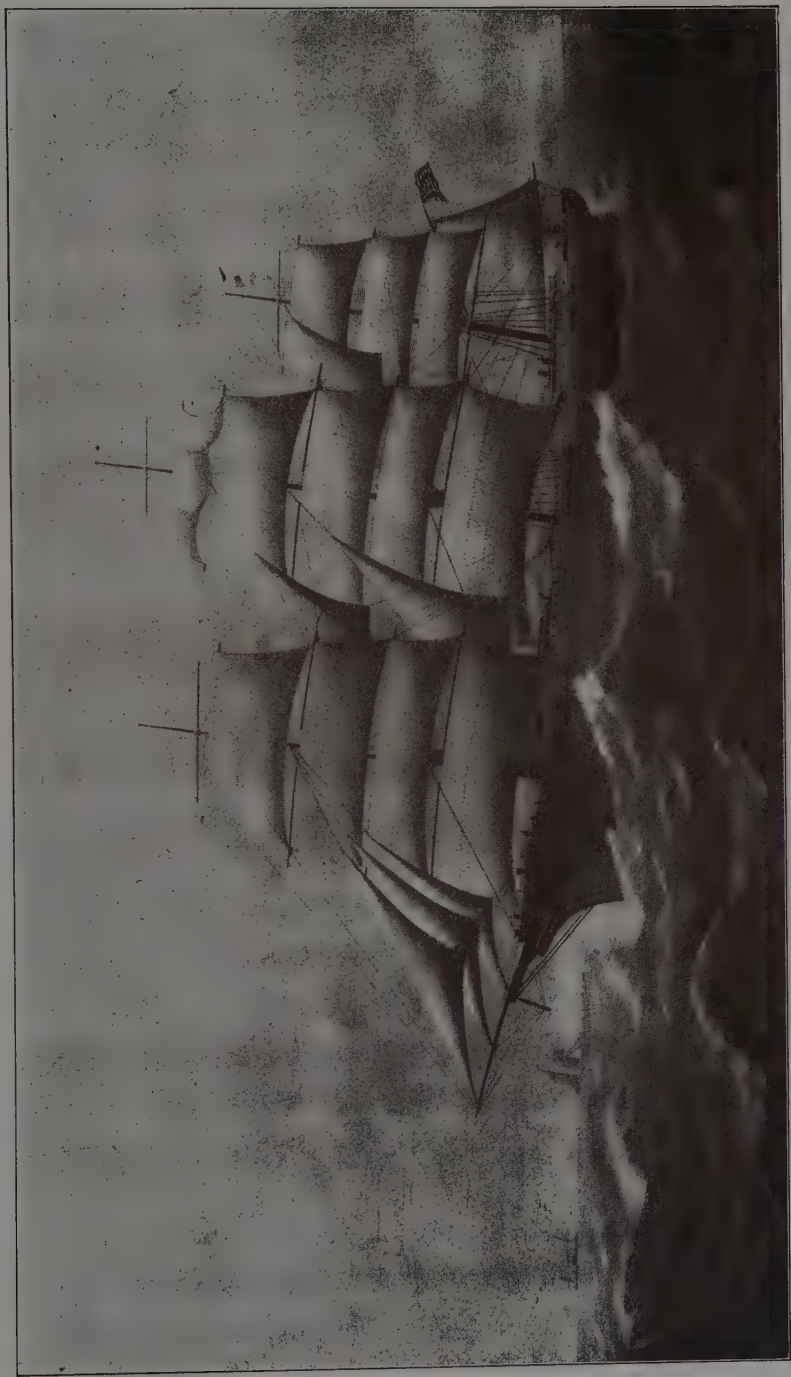
[391] SHIP "GEM OF THE OCEAN" OF BOSTON, 700 TONS, BUILT AT MEDFORD IN 1852



Photograph by George E. Noyes, Newburyport

[392] SHIP "GLEANER" OF NEWBURYPORT, 976 TONS, BUILT AT NEWBURYPORT IN 1854

From a drawing by F. Cassinelli.



[393] CLIPPER SHIP "GLORY OF THE SEAS" OF BOSTON, 2102 TONS, BUILT AT EAST BOSTON IN 1869
The last ship built by Donald McKay.



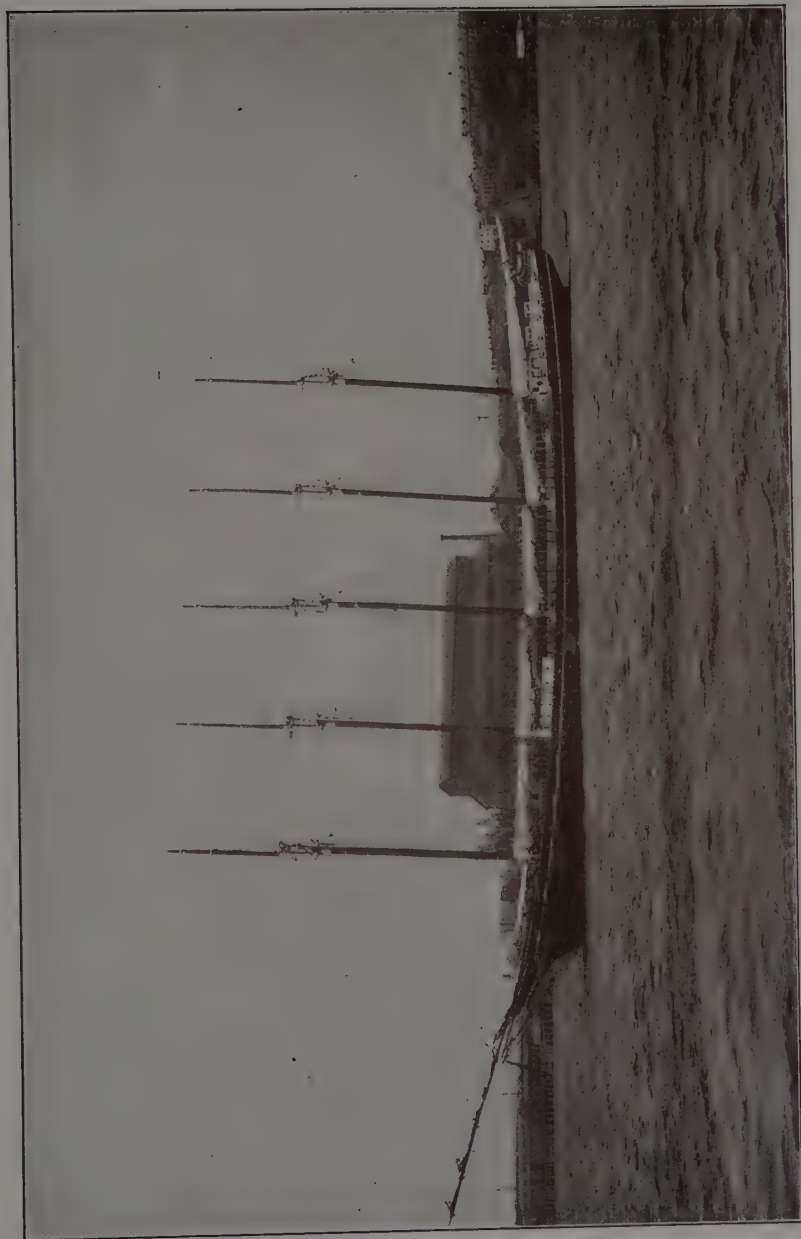
[394] SHIP "GLORY OF THE SEAS" OF BOSTON, 2102 TONS, BUILT AT EAST BOSTON IN 1869

The last ship built by Donald McKay. From a photograph showing the hull at anchor near Seattle about to be burnt for the metal.



Photograph by George E. Noyes, Newburyport

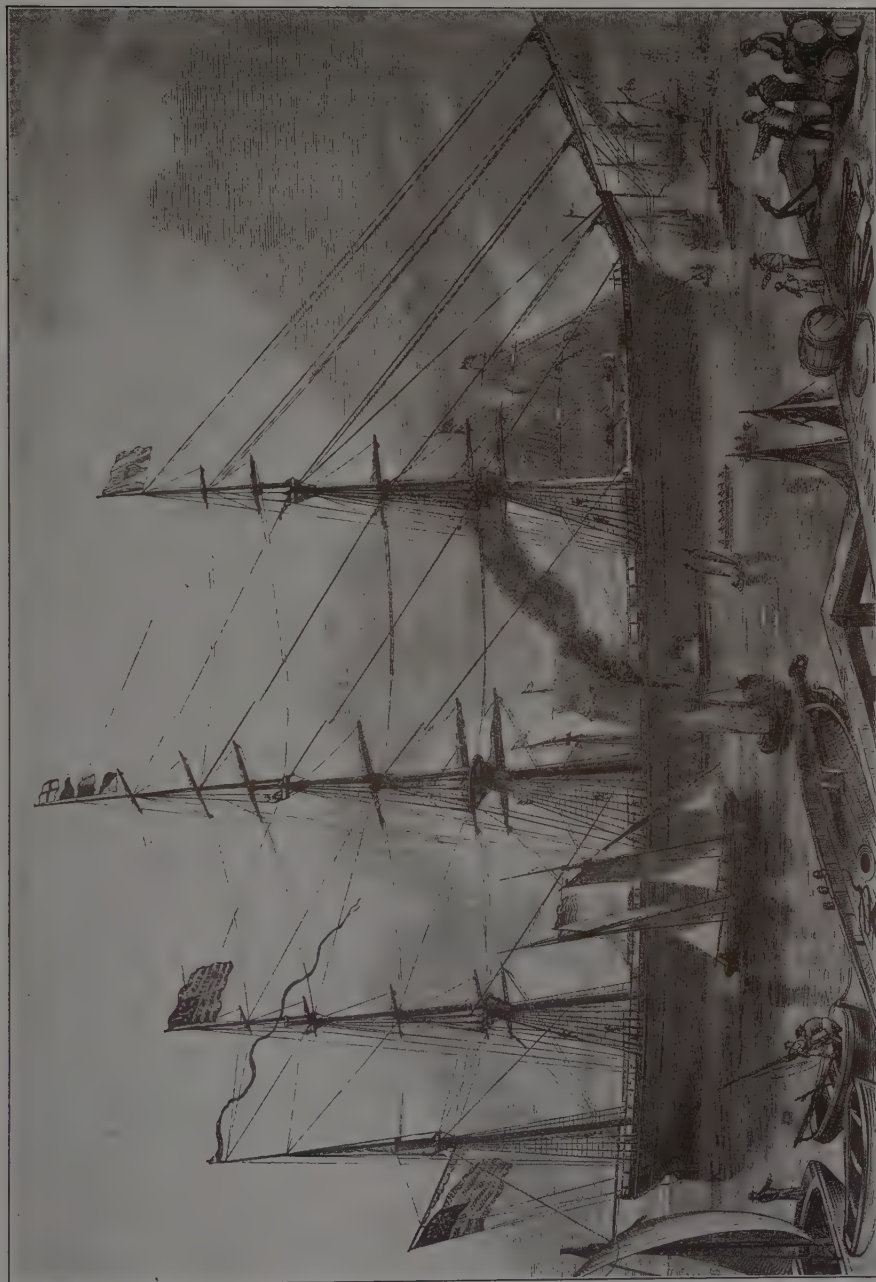
[395] BARK "HAYDEN BROWN" OF NEWBURYPORT, 821 TONS, BUILT AT NEWBURYPORT IN 1876



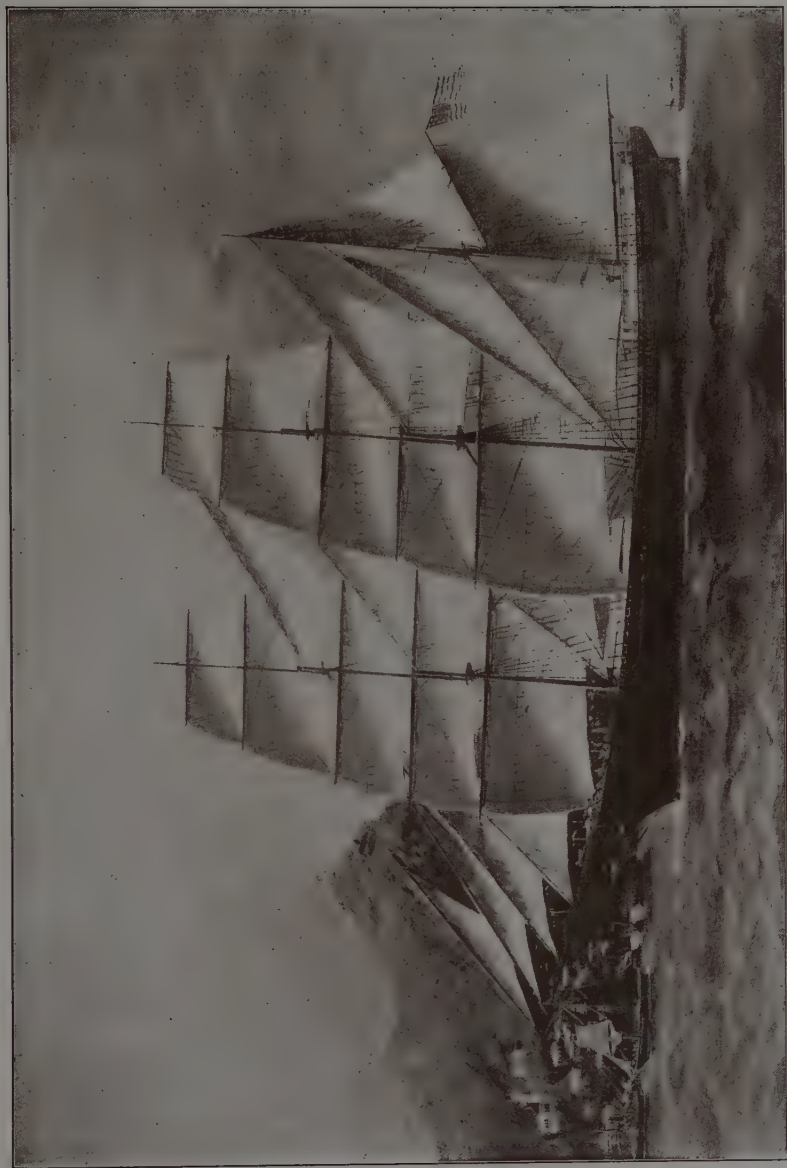
[396] SCHOONER "GOVERNOR AMIES" OF PROVIDENCE, R. I., 1778 TONS. BUILT AT WALDOBORO, ME. IN 1888
Photograph by N. L. Stebbins.



[397] SHIP "GRACE ROSS" OF BELFAST, ME., 1079 TONS, BUILT AT BELFAST IN 1859



[398] CLIPPER SHIP "GREAT REPUBLIC" OF NEW YORK, 4555 TONS, BUILT AT EAST BOSTON IN 1853
The largest clipper ship ever built. From a wood engraving in *Gleason's Pictorial*, 1853.



Photograph by George E. Noyes, Newburyport

[399] BARK "HARRISON G. JOHNSON" OF NEWBURYPORT, 1080 TONS, BUILT AT NEWBURYPORT IN 1877



[400] SHIP "HAZARD" OF SALEM, 325 TONS, BUILT AT SALEM IN 1799,
From a watercolor by M. F. Corné made in 1802.



[401] SHIP "HAZARD" OF SALEM, 325 TONS, BUILT AT SALEM IN 1799
From a watercolor by M. F. Corn  made in 1805.



[402] SHIP "HELEN BREWER" OF BOSTON, 1582 TONS, BUILT AT GLASGOW, SCOTLAND, IN 1891
Sailed from Java, March 7, 1903, and never heard from. Photograph by N. L. Stebbins.



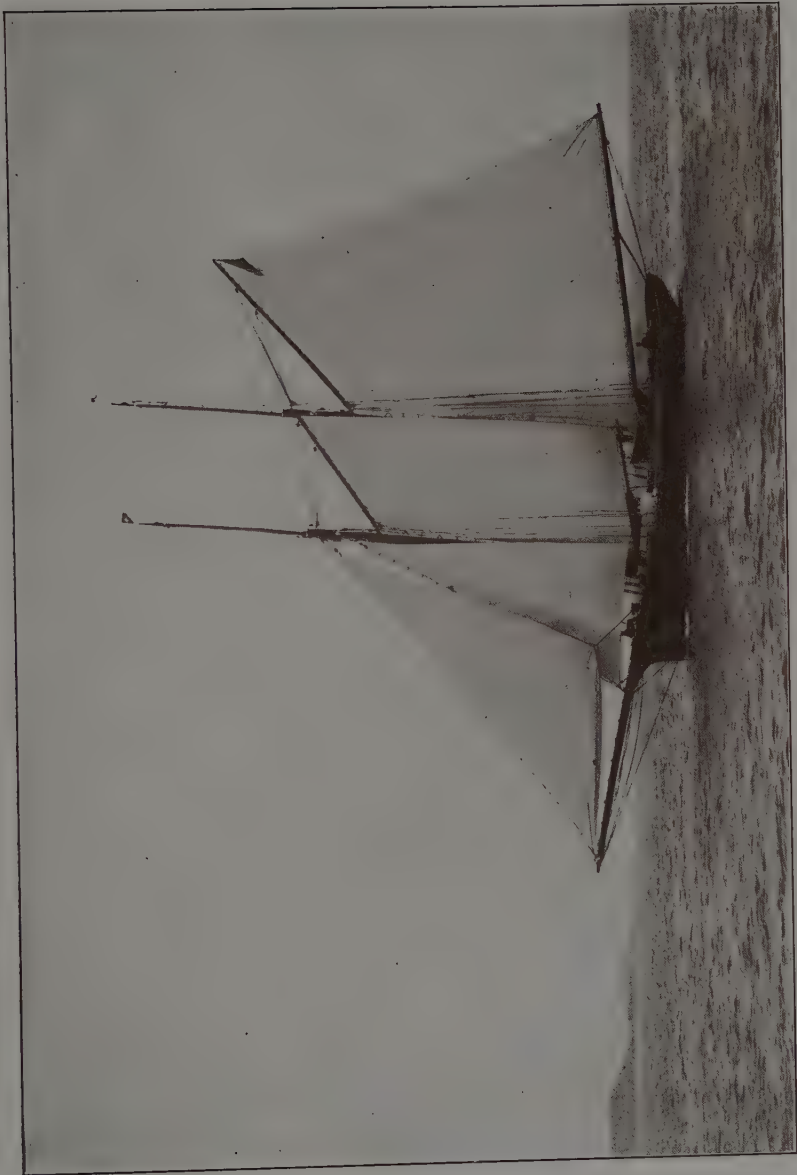
[403] SHIP "HENRY TUKE" OF SALEM, 365 TONS, BUILT AT MEDFORD IN 1824



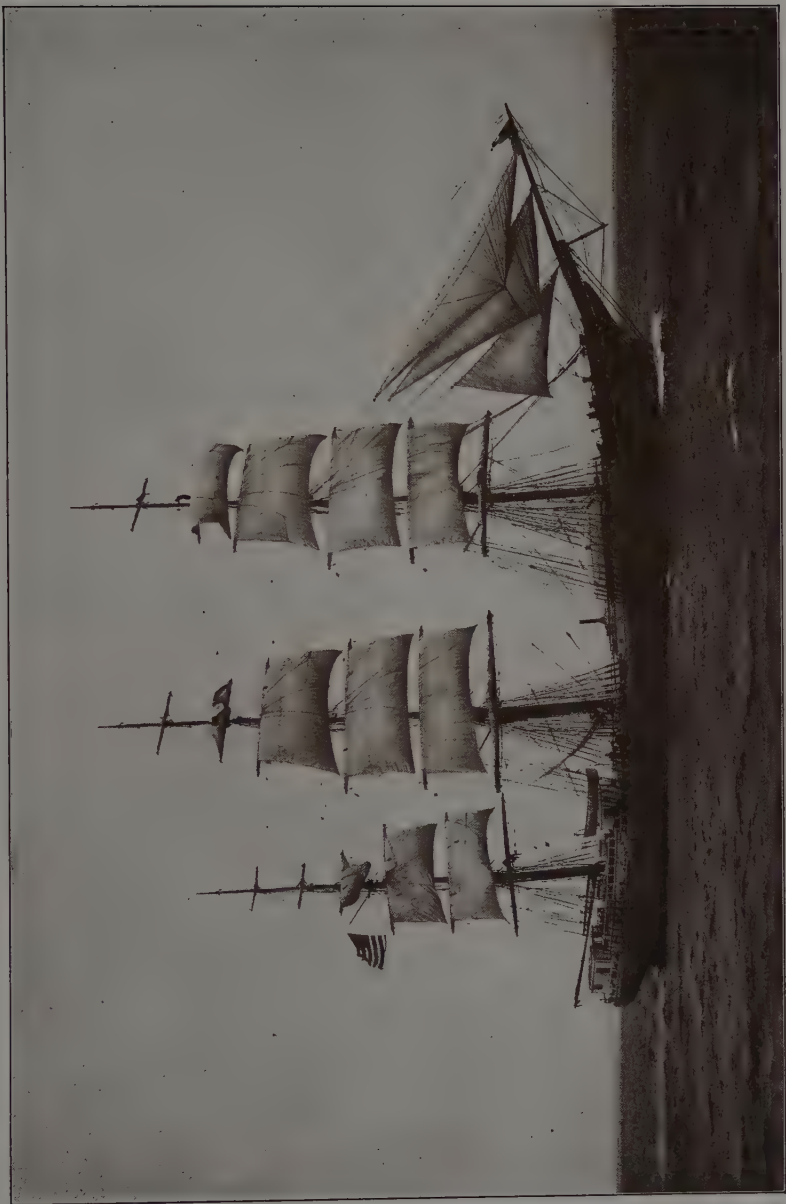
[404] CLIPPER SHIP "HERALD OF THE MORNING" OF BOSTON, 1300 TONS, BUILT AT MEDFORD IN 1855



[405] BARK "HOLLANDER" OF SALEM, 498 TONS, BUILT AT NEWBURY IN 1849



[406] SCHOONER "HOPE LESLIE" OF BOSTON, 44 TONS, BUILT AT BATH, ME. IN 1886
Photograph by N. L. Stebbins.



[407] SHIP "HOTSPUR" OF NEW BEDFORD, 1210 TONS, BUILT AT BATH, ME. IN 1885

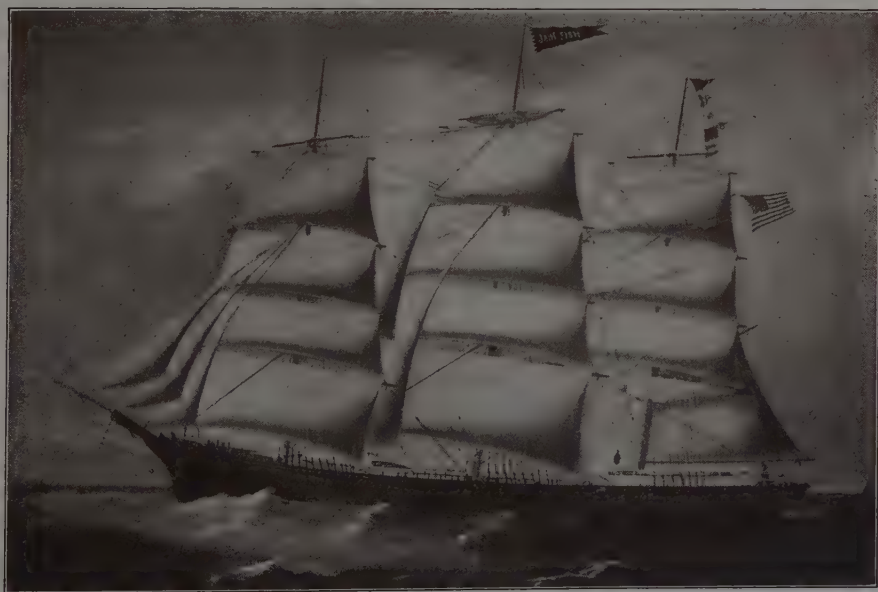


Photograph by George E. Noyes, Newburyport

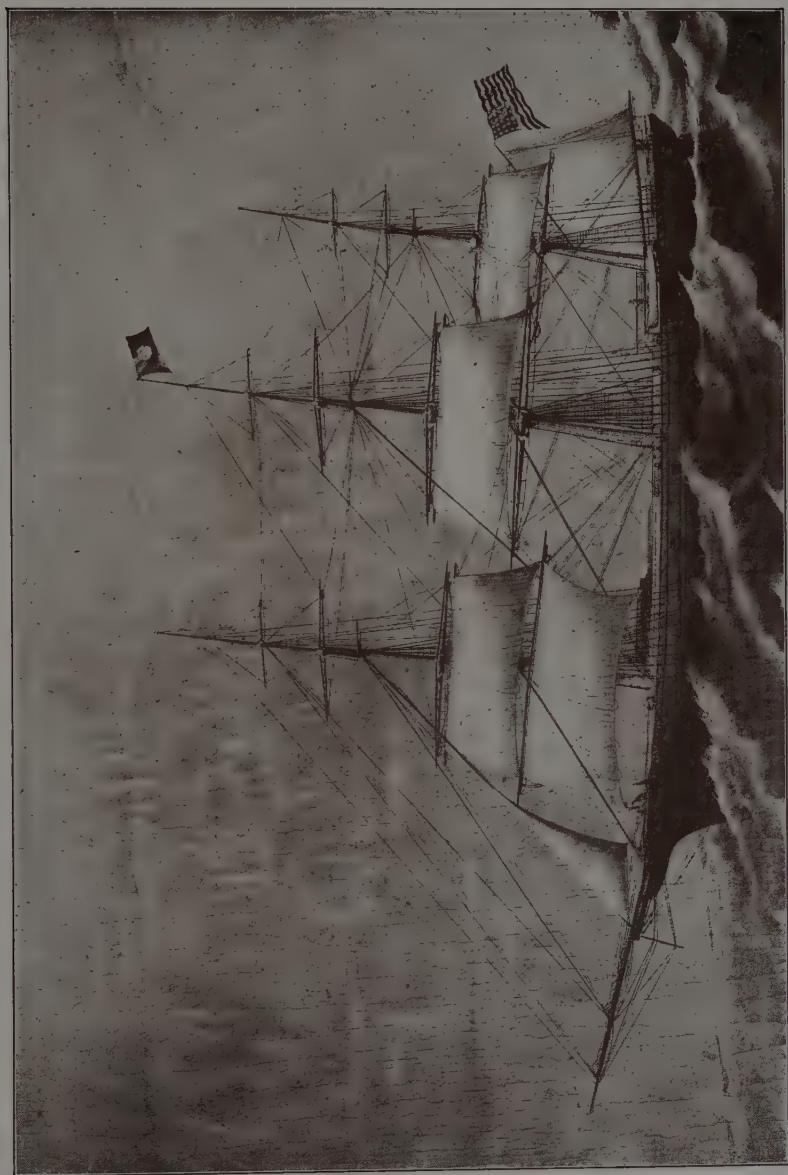
[408] SHIP "HOWADJI" OF NEWBURYPORT, 650 TONS, BUILT AT NEWBURYPORT, IN 1845

Struck by lightning and burned in mid-ocean, Nov. 3, 1857.

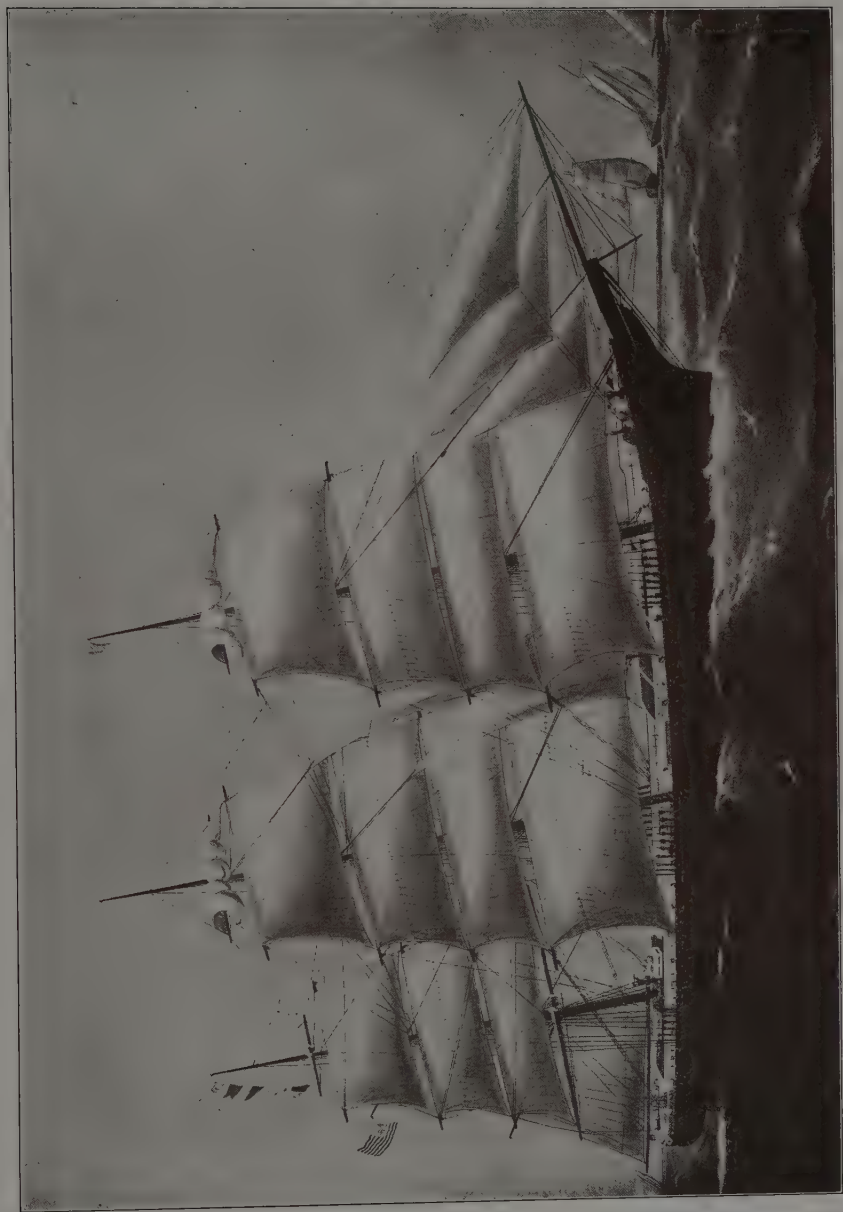
From an oil painting by S. J. Cresey, Newburyport.



[409] SHIP "JANE FISH" OF THOMASTON, ME., 1490 TONS, BUILT AT THOMASTON, ME., IN 1868



[410] SHIP "HUGUENOT" OF NEWBURYPORT, 935 TONS, BUILT AT NEWBURYPORT IN 1845



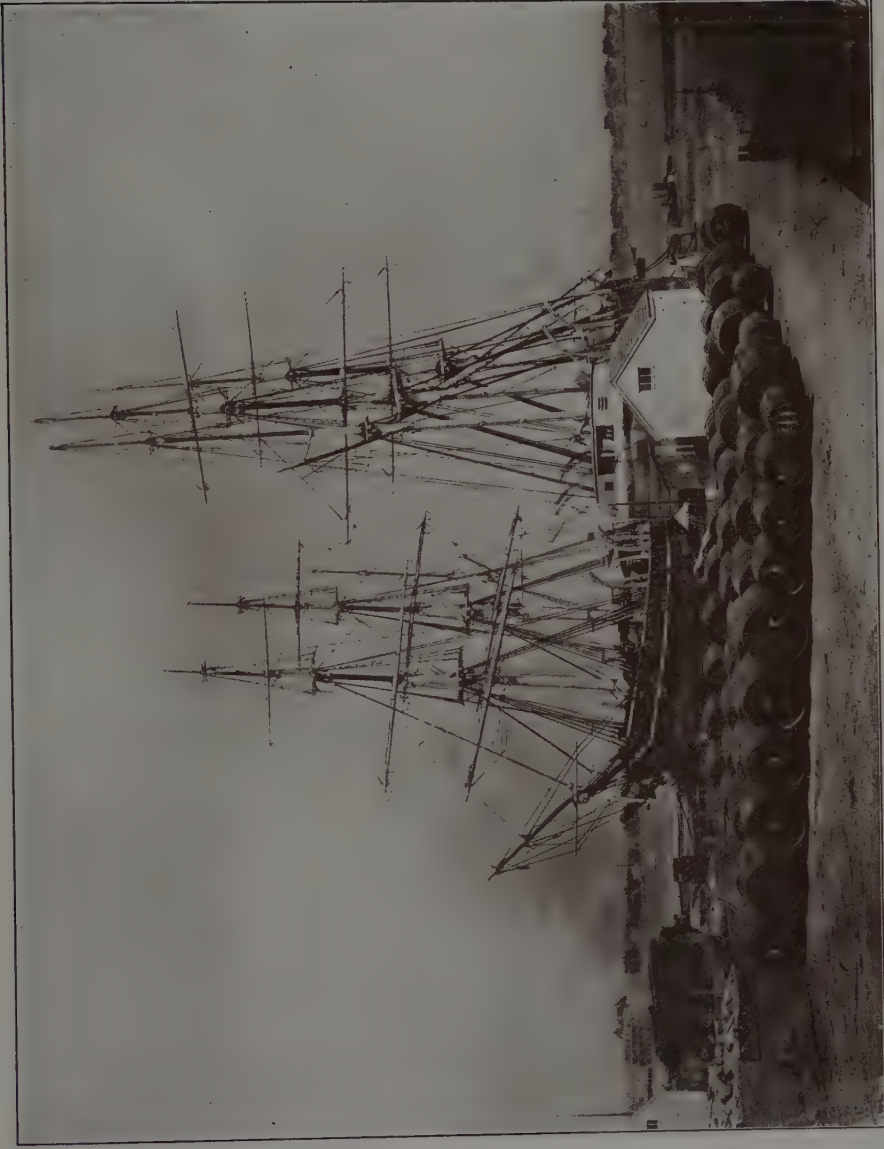
[411] SHIP "HUGUENOT" OF BOSTON, 1181 TONS, BUILT AT EAST BOSTON IN 1869



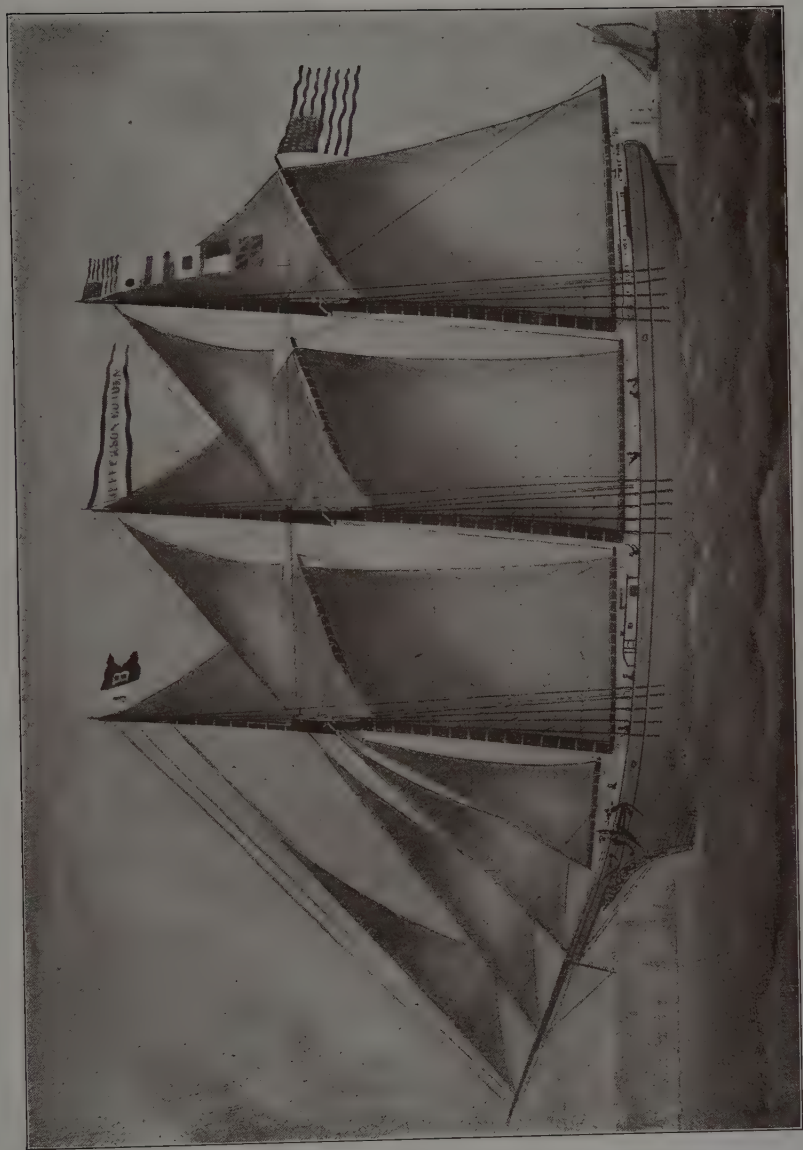
[412] SHIP "INSPECTOR" OF BOSTON, 1860 TONS, BUILT AT BELFAST, ME. IN 1860



[413] SHIP "ISAAC H. BOARDMAN" OF NEWBURYPORT, 1432 TONS, BUILT AT PORTSMOUTH, N. H. IN 1855



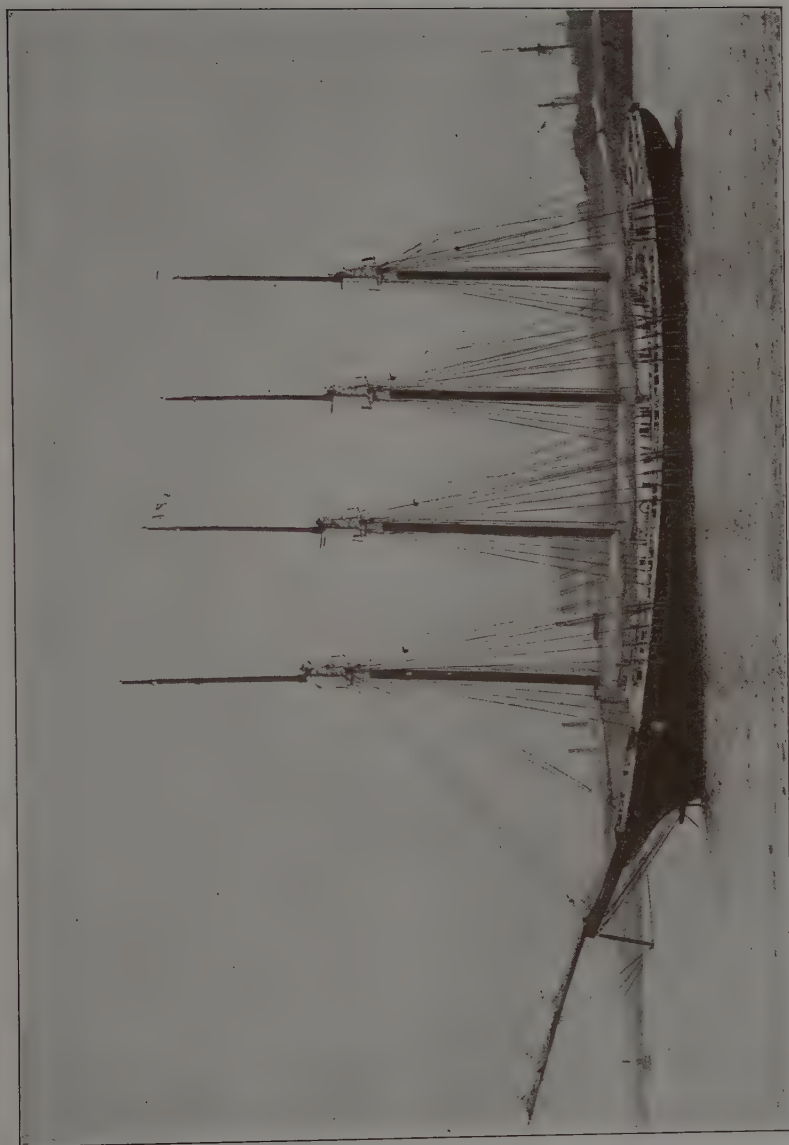
[414] WHALING BARK "JAMES ALLEN", 355 TONS (at right), WHALING BARK "PLATINA" (at left), LYING
AT A NEW BEDFORD WHARF



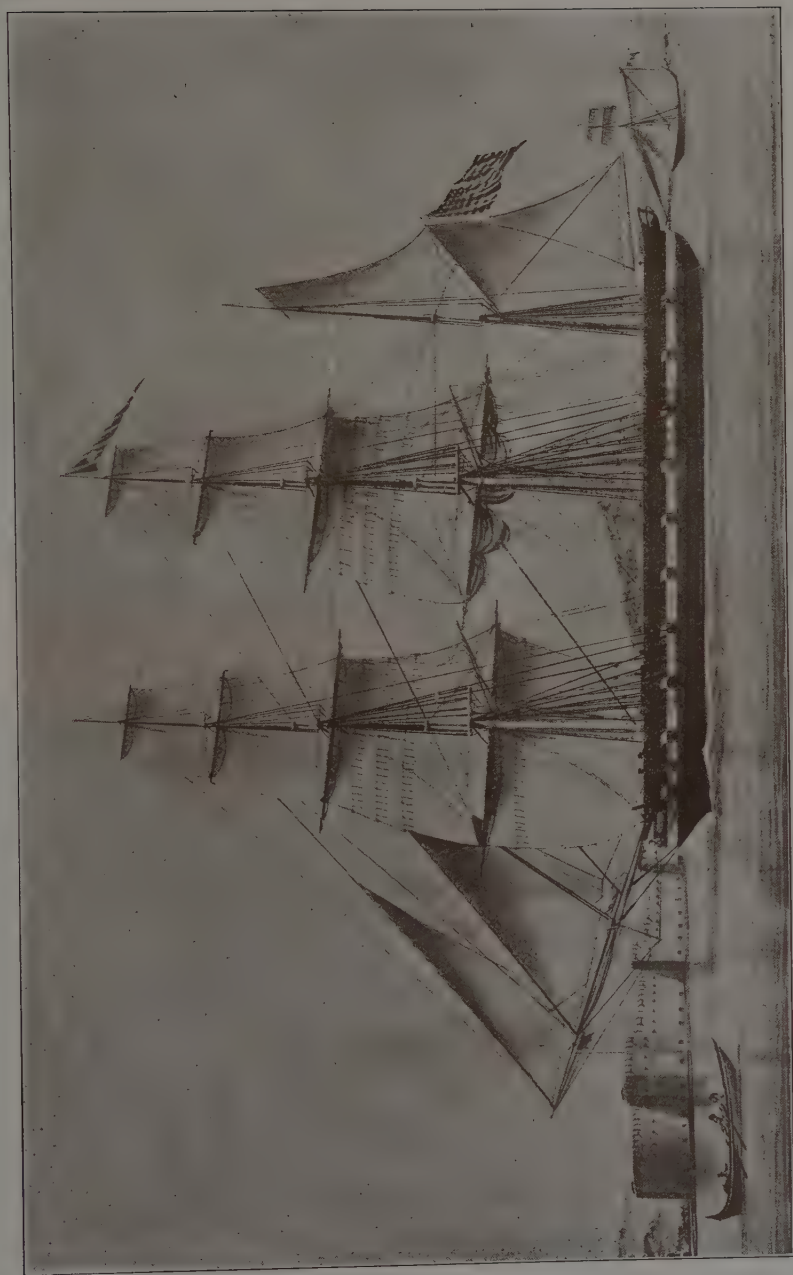
[415] SCHOONER "JEFFERSON BORDEN" OF FALL RIVER, 562 TONS, BUILT AT KENNEBUNKPORT, ME. IN 1867
From an oil painting showing her entering Leghorn in 1868.



Photograph by George E. Noyes, Newburyport
[416] SHIP "JOHN N. CUSHING" OF NEWBURYPORT, 671 TONS, BUILT AT NEWBURYPORT IN 1853
From a watercolor painted by Frederic Roux.

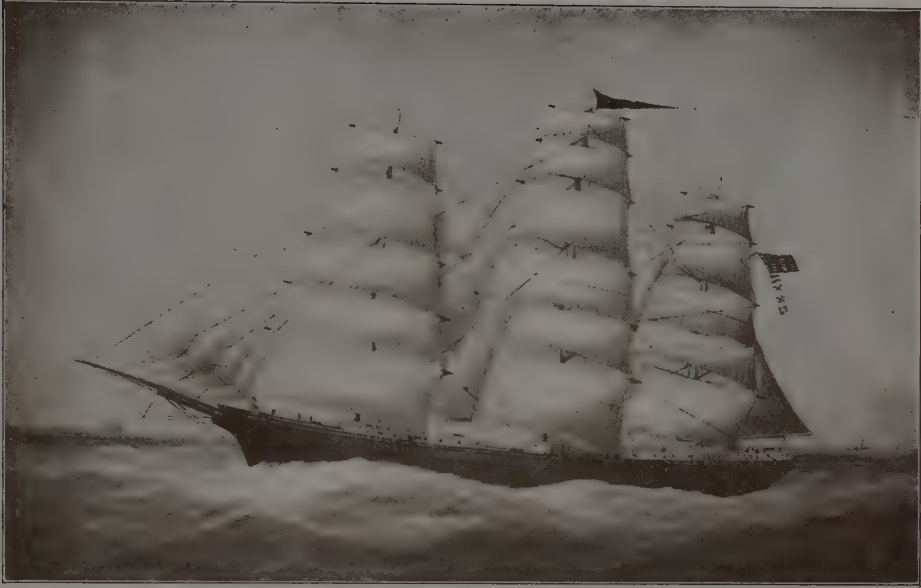


[417] SCHOONER "JOHN S. AMES" OF BOSTON, 963 TONS, BUILT AT BATH, ME. IN 1889
From a photograph by N. L. Stebbins.



[418] BARK "JONES" OF SALEM, 271 TONS, BUILT AT MEDFORD IN 1818

From a watercolor showing the vessel at Smyrna in 1834.

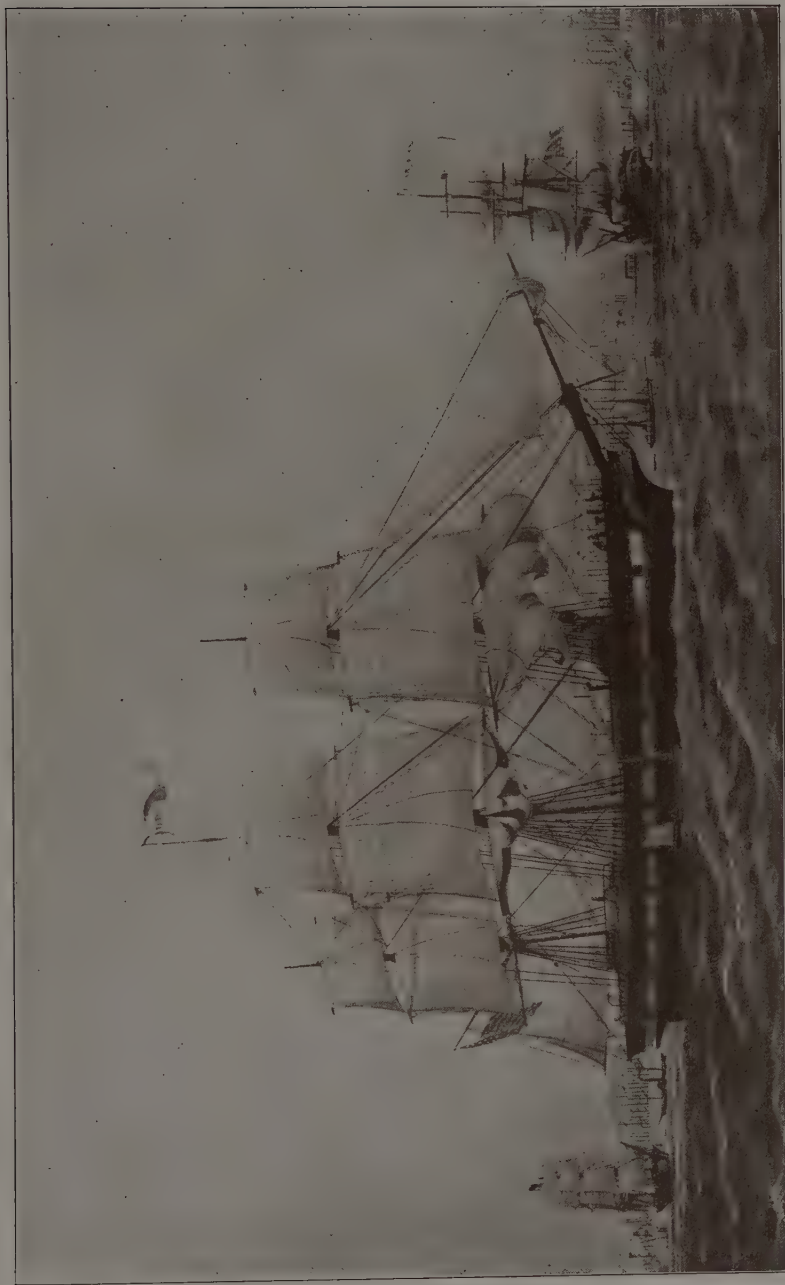


[419] SHIP "JOSEPH B. THOMAS" OF BOSTON, 1938 TONS, BUILT AT THOMASTON, ME., IN 1881



[420] SHIP "JOSEPH B. THOMAS" OF BOSTON, 1938 TONS, BUILT AT THOMASTON, ME., IN 1881

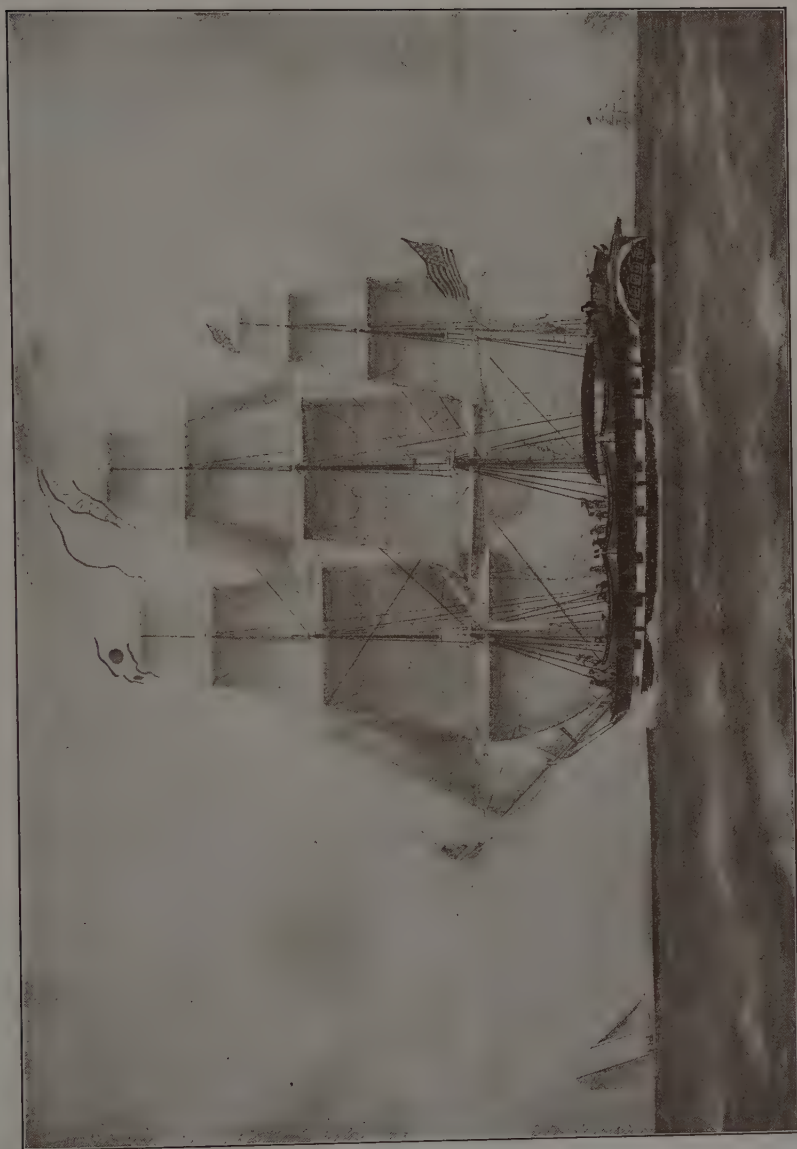
From an oil painting showing her dismasting in mid-ocean.



[421] SHIP "JUDAH TOURO" OF NEW ORLEANS, 740 TONS, BUILT AT PORTSMOUTH, N. H. IN 1845



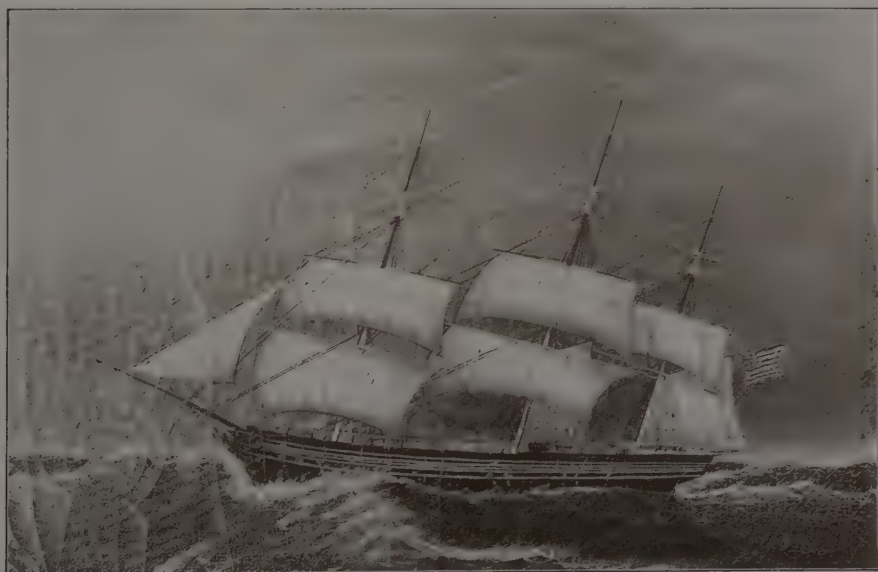
[422] BARK "KENNARD" OF BOSTON, 592 TONS, BUILT AT EAST MACHIAS, ME. IN 1877
From a photograph by N. L. Stebbins.



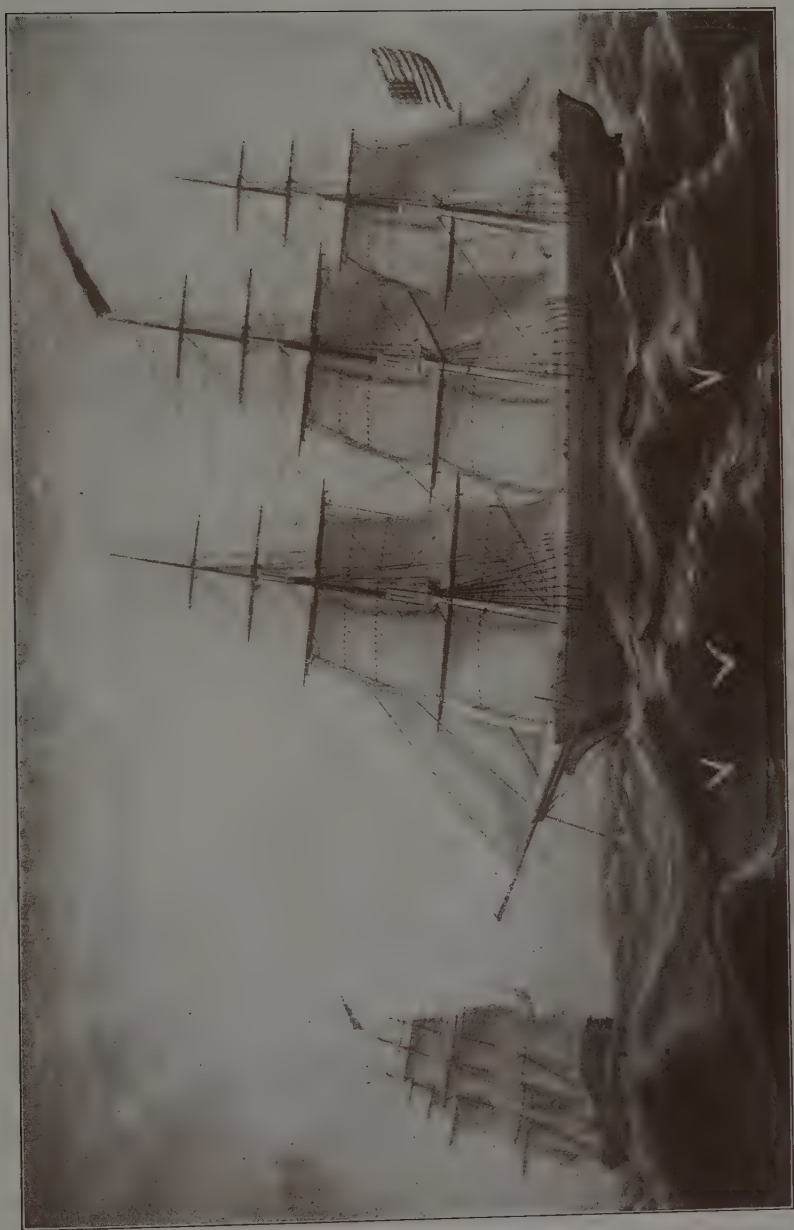
[423] WHALING SHIP "KUTUSOFF" OF NEW BEDFORD, 415 TONS



[424] SHIP "L. B. GILCHRIST" OF THOMASTON, ME., 1157 TONS, BUILT AT THOMASTON, ME., IN 1866



[425] SHIP "LELAND" OF BOSTON, 347 TONS, BUILT AT MEDFORD IN 1839



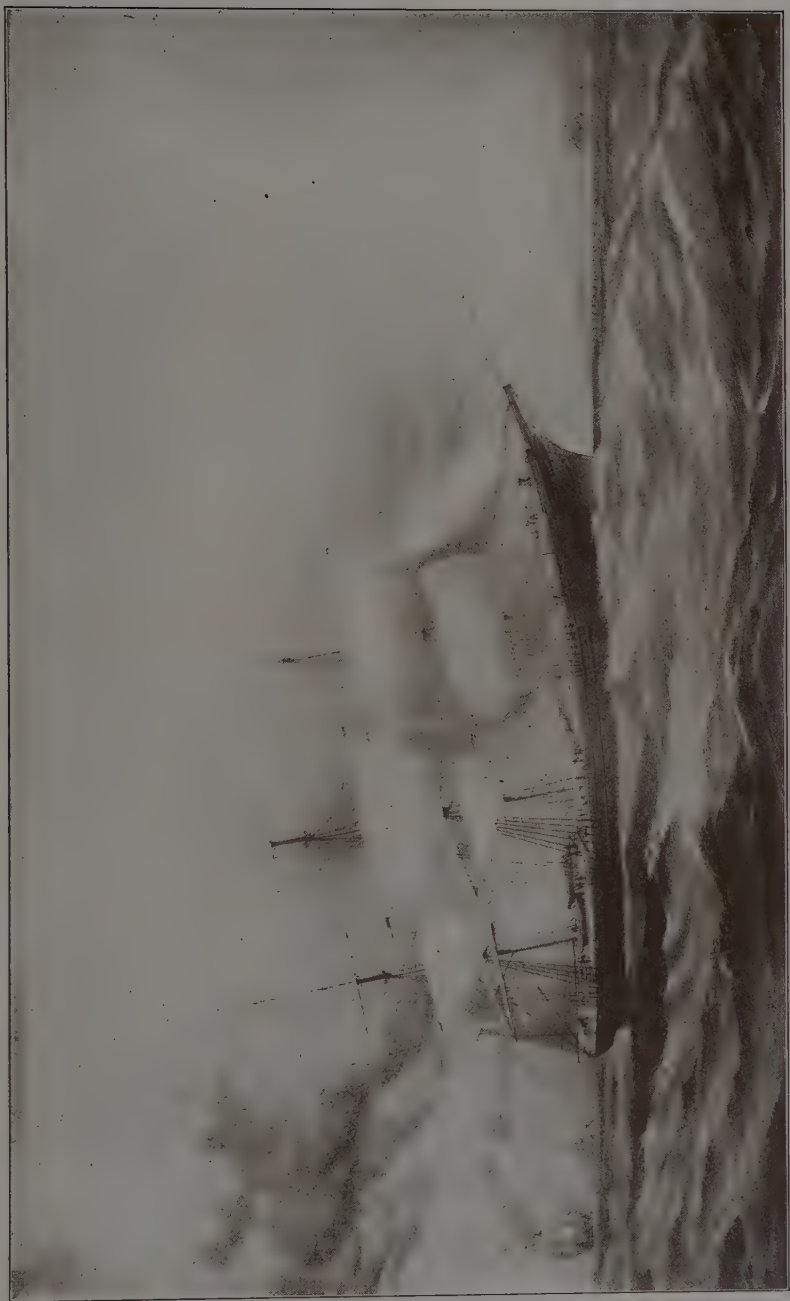
[426] SHIP "LAWRENCE BROWN" OF NEWBURYPORT, 795 TONS, BUILT AT NEWBURYPORT IN 1855



Photograph by George E. Noyes, Newburyport

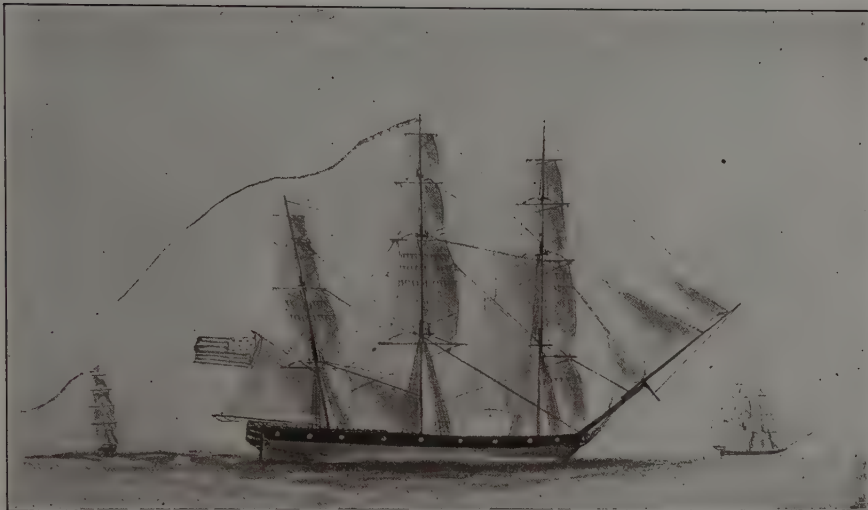
[427] SHIP "LEODES" OF BOSTON, 445 TONS, BUILT AT KINGSTON, MASS. IN 1841

From a painting by J. Spin, 1865, Amsterdam, showing the ship in a storm, Feb. 17, 1856.



[428] CLIPPER SHIP "LIGHTNING" OF LIVERPOOL, ENG., 2084 TONS, BUILT BY DONALD MCKAY AT EAST BOSTON
IN 1854

Made the passage from Boston to Liverpool, from land to land, in ten days. "The swiftest ship that ever sailed the seas."
Capt. A. H. Clark.

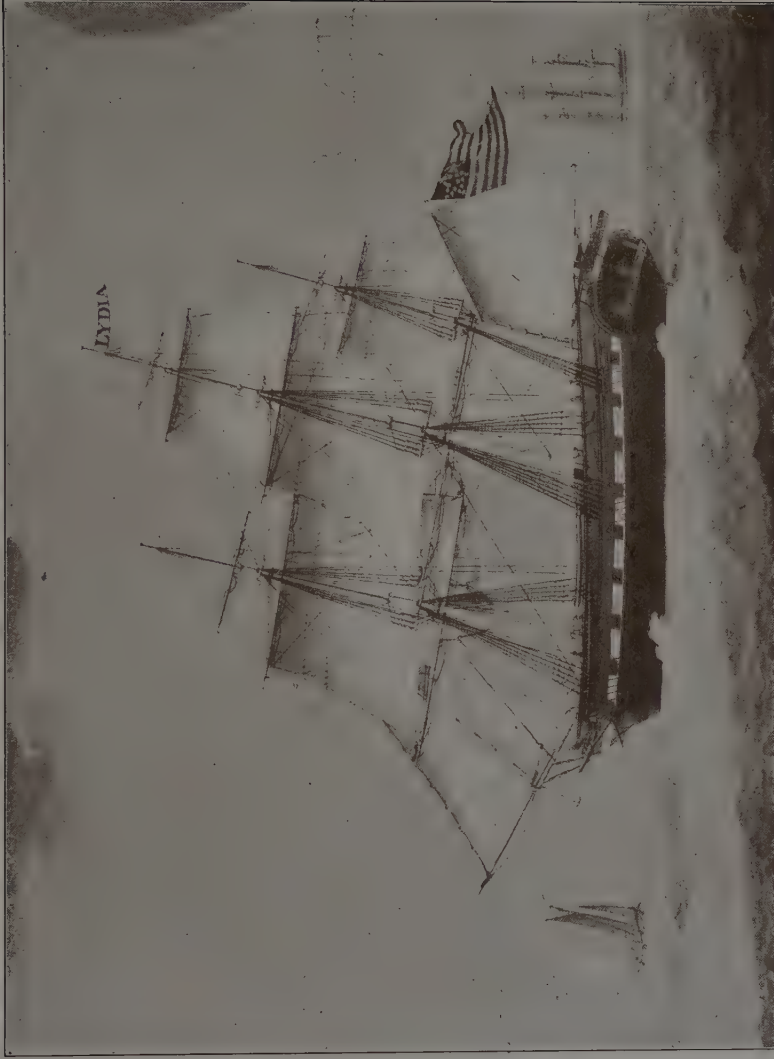


[429] SHIP "LIVELY"

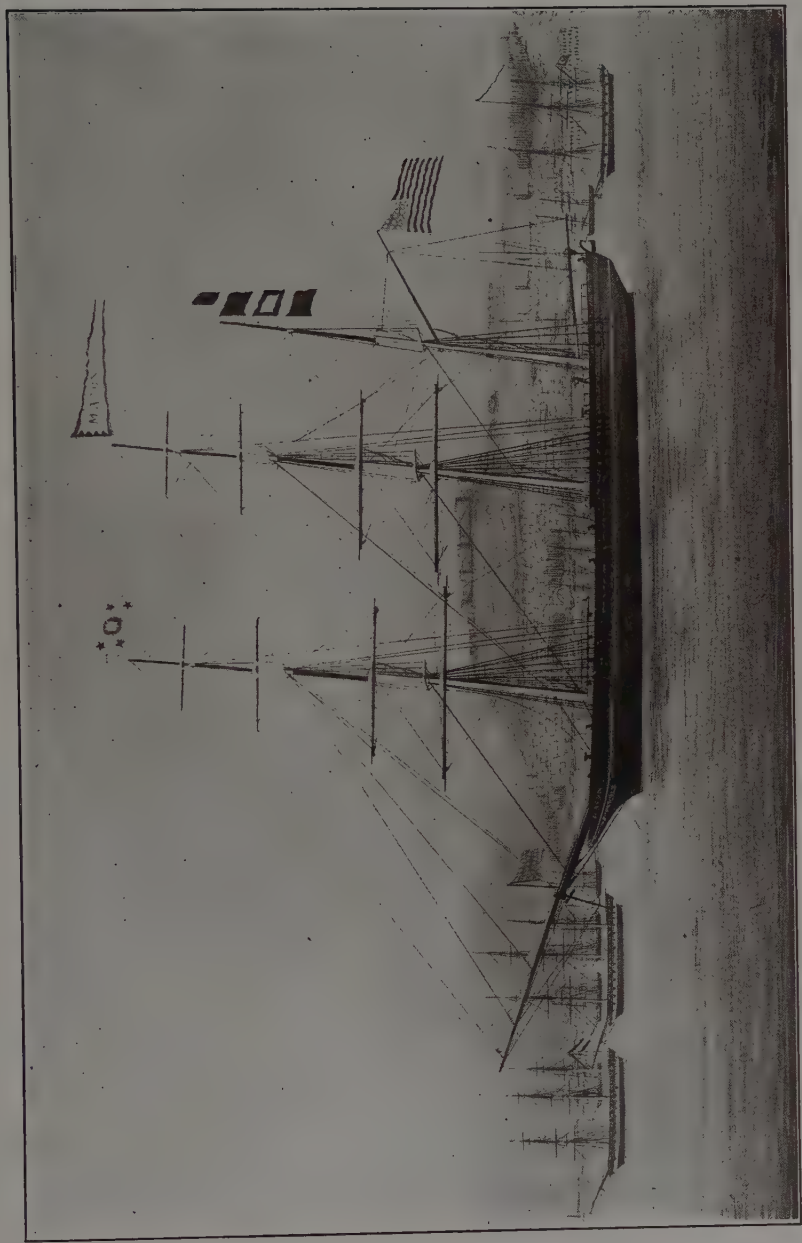
Copy of Macpherson from a sketch in the journal of the ship "Horace" of Salem, made in 1805.



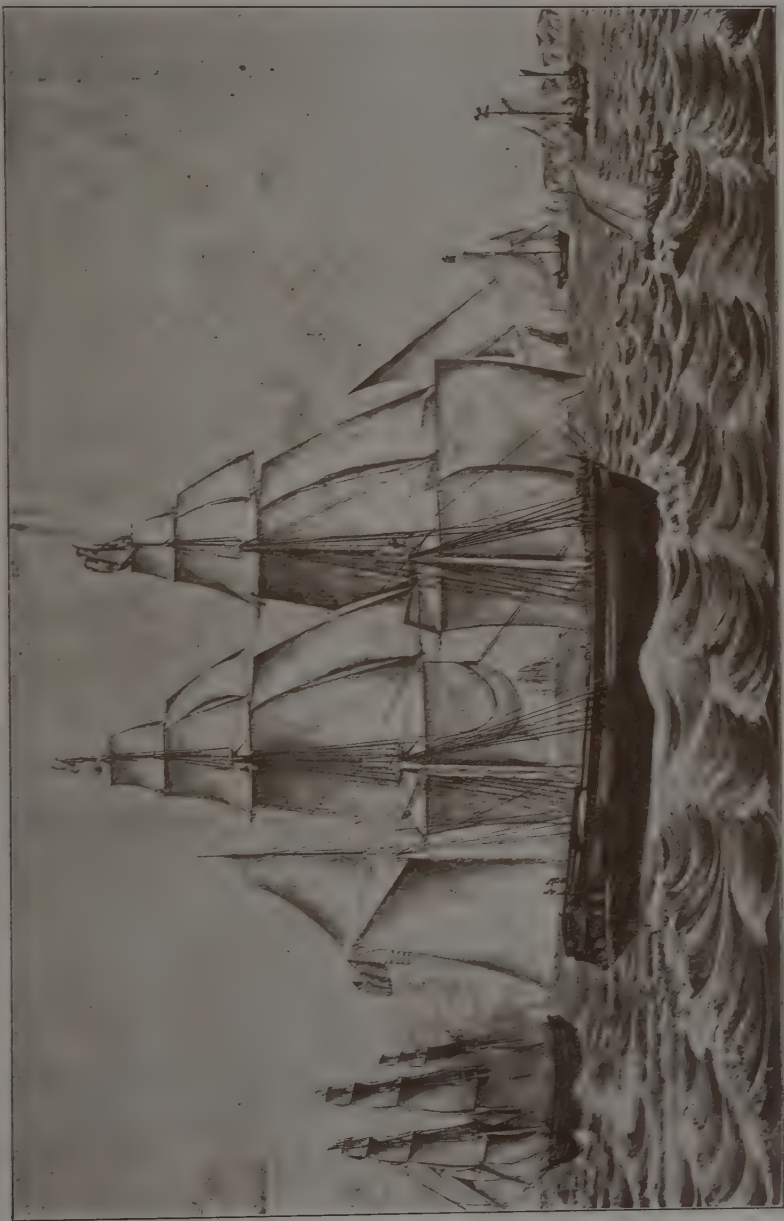
[430] SHIP "MARY E. KINGSBURY" OF BOSTON, 530 TONS, ON THE STOCKS AT NEWBURYPORT IN 1869



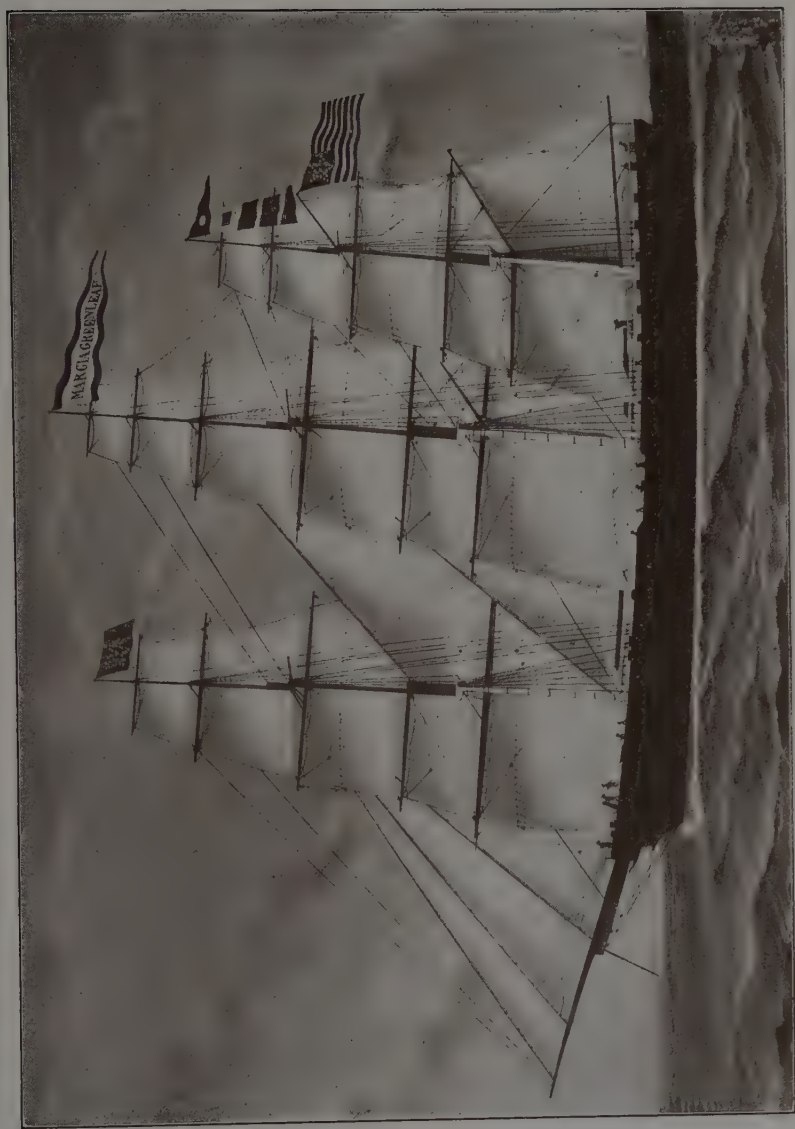
[431] SHIP "LYDIA" OF BOSTON, 293 TONS, BUILT IN 1820.
From a watercolor by Door T. Mooy, Helder, showing the vessel beating into the Texel Road, Oct. 7, 1831.



[432] BARK "MACON" OF BOSTON, 325 TONS, BUILT AT CAPE ELIZABETH, ME. IN 1853
From a watercolor by Raffaele Corscini.



[433] BARK "MARBLEHEAD" OF BOSTON, BUILT AT SOUTH BOSTON IN 1832
Lost on Little Bahama Bank, Aug. 2, 1837. From a watercolor by D. G. Reynert.



[434] SHIP "MARCIA GREENLEAF" OF BRUNSWICK, ME., 1177 TONS, BUILT AT BRUNSWICK IN 1855
From a painting by P. Weytz, Antwerp.



[435] WHALING BARK "MARS" OF NEW BEDFORD, 251 TONS, BUILT AT BOSTON IN 1825



[436] WHALING BARK "MARS" OF NEW BEDFORD, 251 TONS, BUILT AT BOSTON IN 1825
View on deck looking forward.



[437] BRIG "MARTHA WORTHINGTON" OF PROVINCETOWN, 180 TONS, BUILT AT BOSTON IN 1848
From a watercolor showing her entering Palermo, April 28, 1850.



[438] SHIP "MARY GLOVER" OF BOSTON, 593 TONS, BUILT AT EAST BOSTON IN 1849
From an oil painting by Egide Liming, 1858.



Photograph by George E. Noyes, Newburyport

[439] SHIP "MASCONOMO" OF NEWBURYPORT, 824 TONS, BUILT AT NEWBURY IN 1848

From a painting by P. Weytz, Antwerp.



Photograph by George E. Noyes, Newburyport

[440] BARK "MASONIC" OF STOCKTON SPRINGS, ME., 539 TONS, BUILT AT STOCKTON SPRINGS, MAINE, IN 1864

From a painting by a Chinese artist showing the ship coming into Hong Kong.



Photograph by George E. Noyes, Newburyport

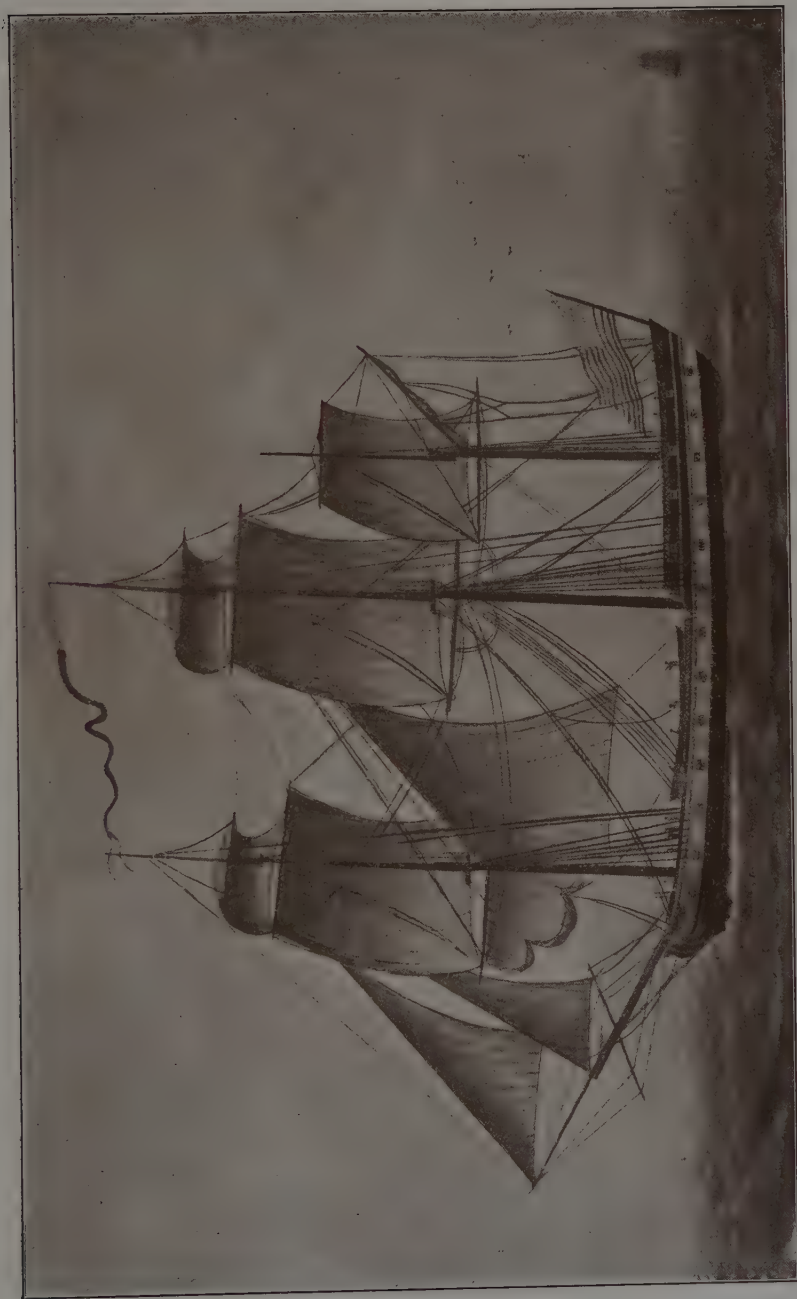
[441] BARK "MAUD SHERWOOD" OF BOSTON, 498 TONS, BUILT AT NEW-BURYPORT IN 1883

From a painting by P. Weytz, showing the vessel passing Flushing in 1857.



Photograph by George E. Noyes, Newburyport

[442] SHIP "MEDORA" OF NEWBURYPORT, 314 TONS, BUILT AT NEWBURY-PORT IN 1832.



[443] SLOOP-OF-WAR "MERRIMACK", 530 TONS, BUILT AT NEWBURYPORT IN 1801



[444] SHIP "MERRIMAC" OF NEWBURYPORT, 414 TONS, BUILT AT NEWBURY
IN 1833

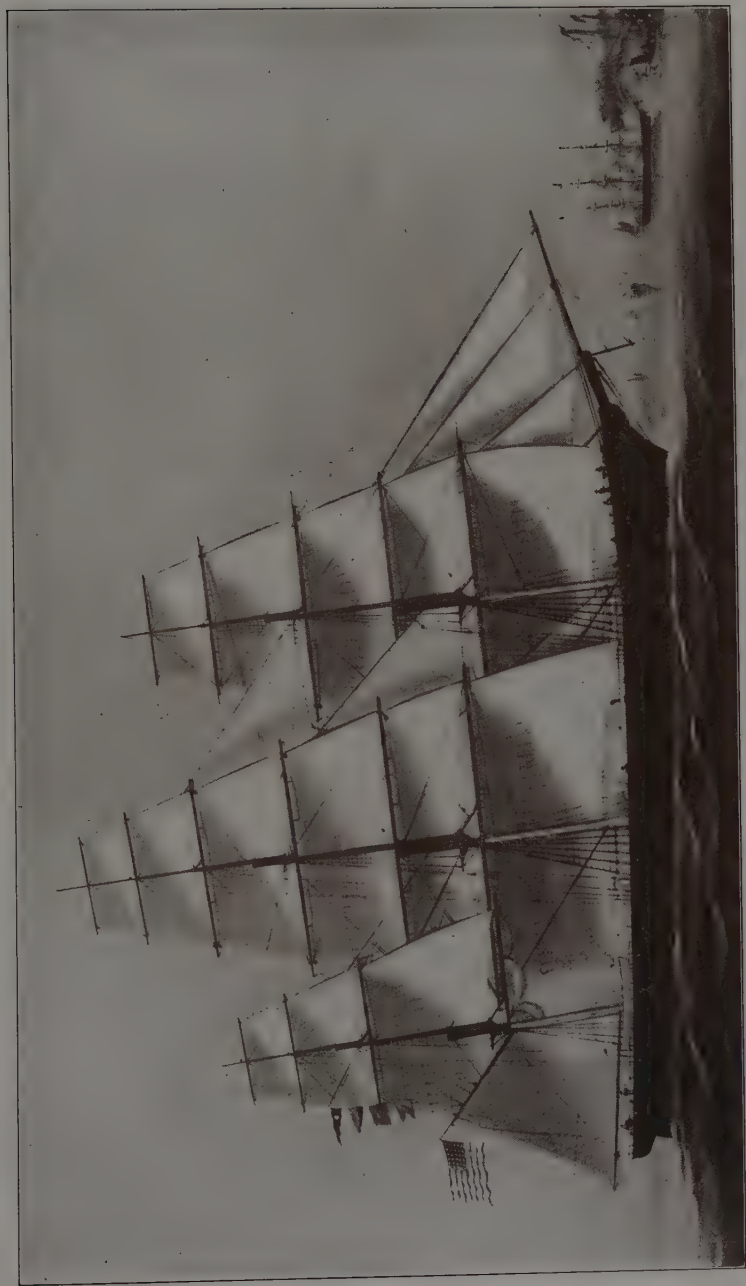
From a painting by P. Weytz, Antwerp.



[445] SHIP "MONTEREY" OF BOSTON, 422 TONS, BUILT AT MEDFORD IN 1846
Sold to German owners in 1863 and name changed to "George Otto."



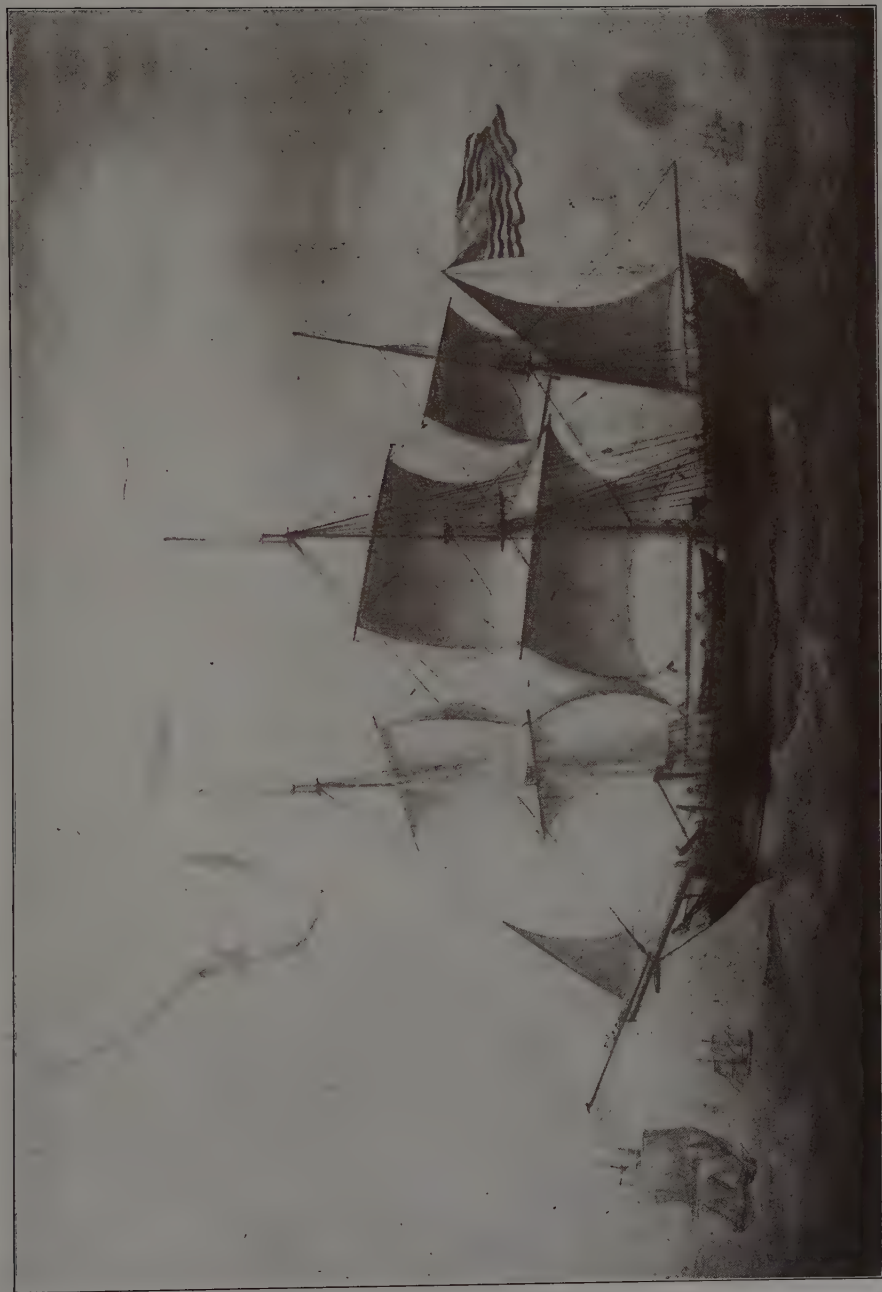
[446] SHIP "MESSENGER" OF SALEM, 277 TONS, BUILT AT SALEM IN 1805
From a watercolor by Hré Pellegriin, Marseilles, 1827.



[447] CLIPPER SHIP "MIDNIGHT" OF BOSTON, 1000 TONS, BUILT AT PORTSMOUTH, N. H. IN 1854
Painted in China from lines drawn in London. Her figure-head was an owl.



[448] SHIP "MINDORO" OF SALEM, 1065 TONS, BUILT AT EAST BOSTON IN 1846



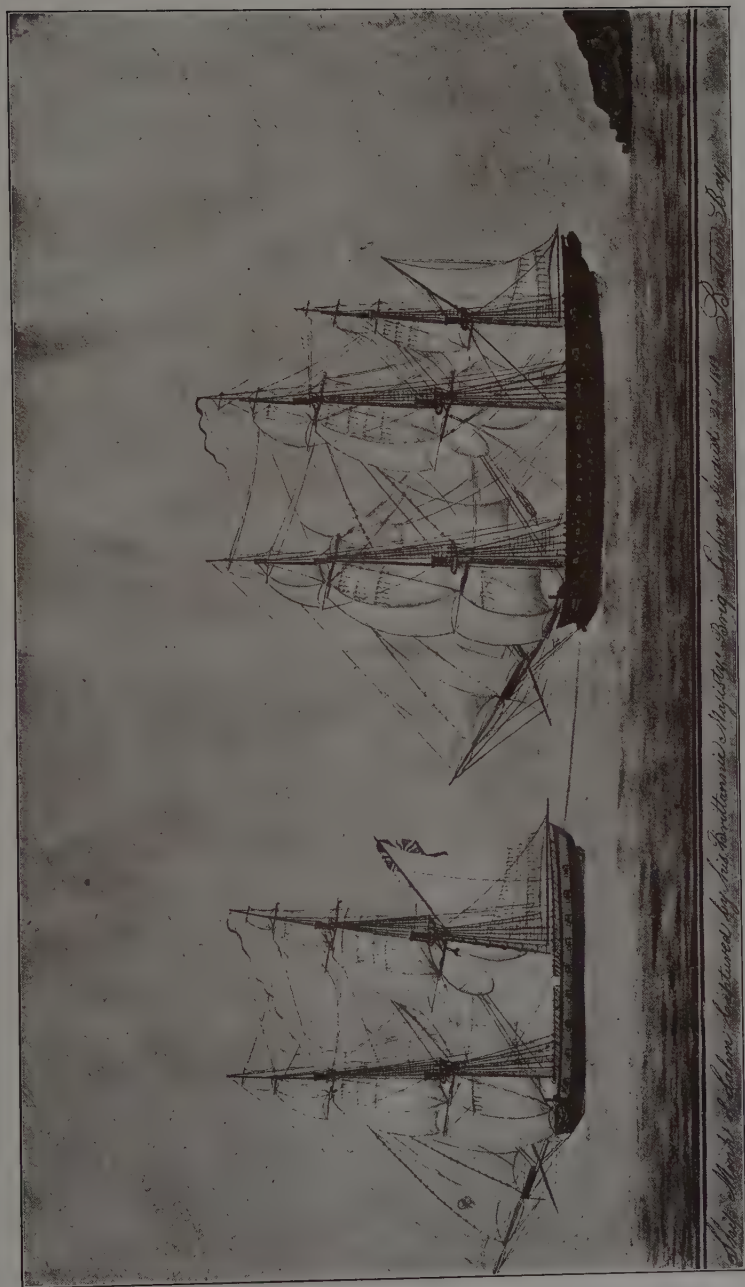
Photograph by George E. Noyes, Newburyport

[449] SHIP "MINERVA" OF BOSTON, 223 TONS, BUILT AT PEMBROKE IN 1808

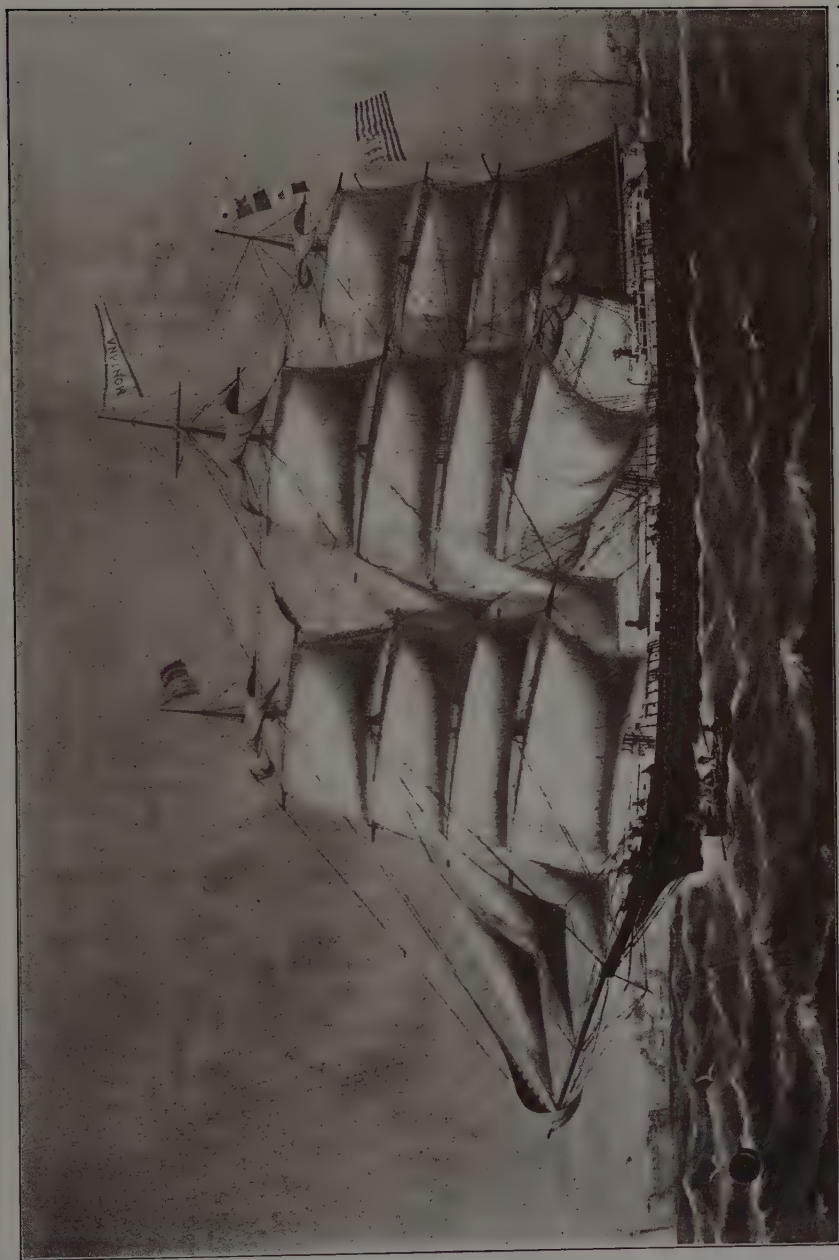
The name "J. W. Williams, 1809" appear in the lower right-hand corner in a dark label which may cover another signature. The drawing resembles the work of Anton Roux, sen.



[450] BARK "MINNIE ALLEN" OF BOSTON, 662 TONS, BUILT AT BATH, ME. IN 1874
From a painting by Edward Adams made in 1875.
Photograph by George E. Noyes, Newburyport



[451] SHIP "MONK" OF SALEM, 253 TONS, BUILT AT NOBLEBOROUGH, ME. IN 1805
 From a watercolor showing the vessel captured in Boston Bay, Aug. 28, 1812, by H. M. Brig "Lybra".



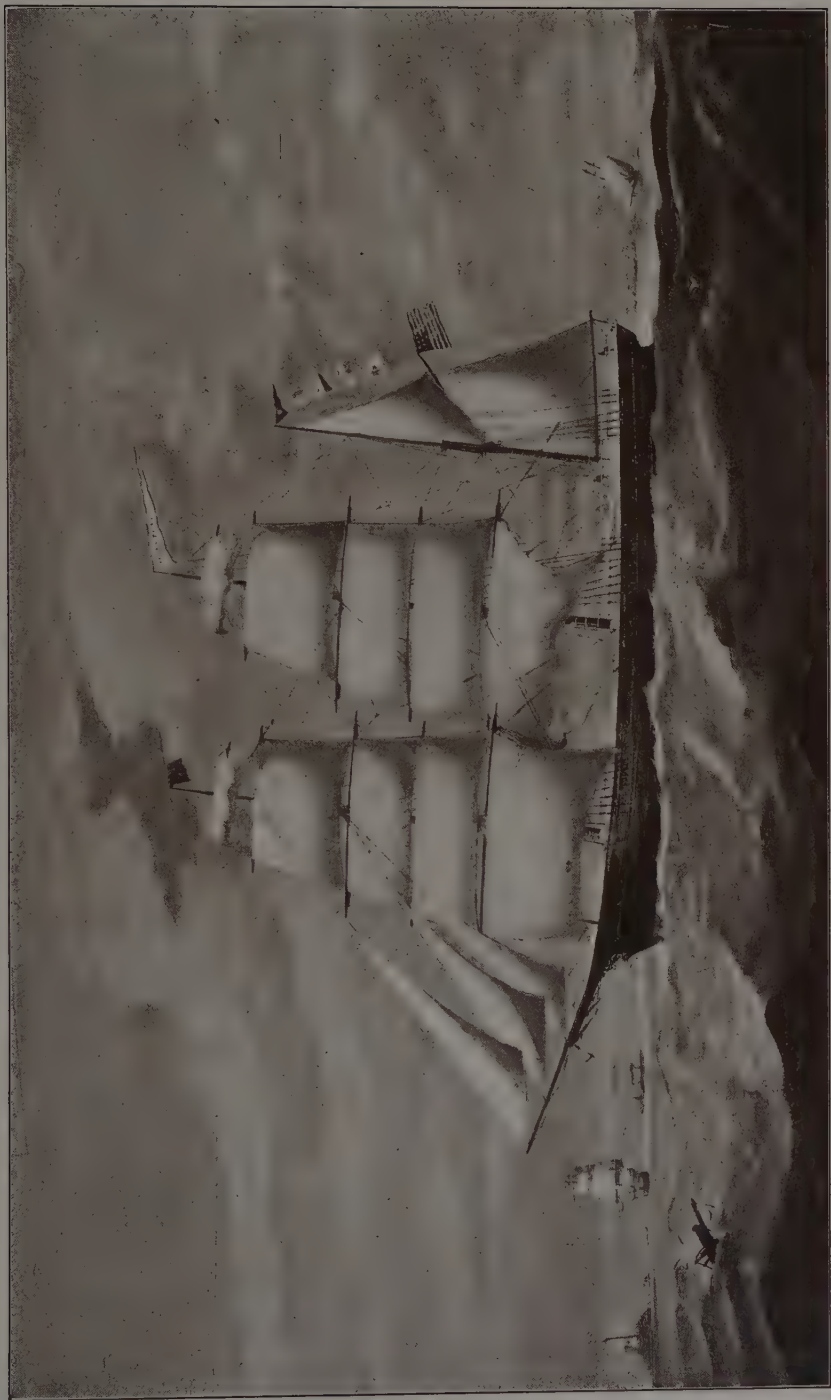
Photograph by George E. Noyes, Newburyport

[452] SHIP "MONTANA" OF NEWBURYPORT, 1,269 TONS BUILT AT NEWBURYPORT IN 1865

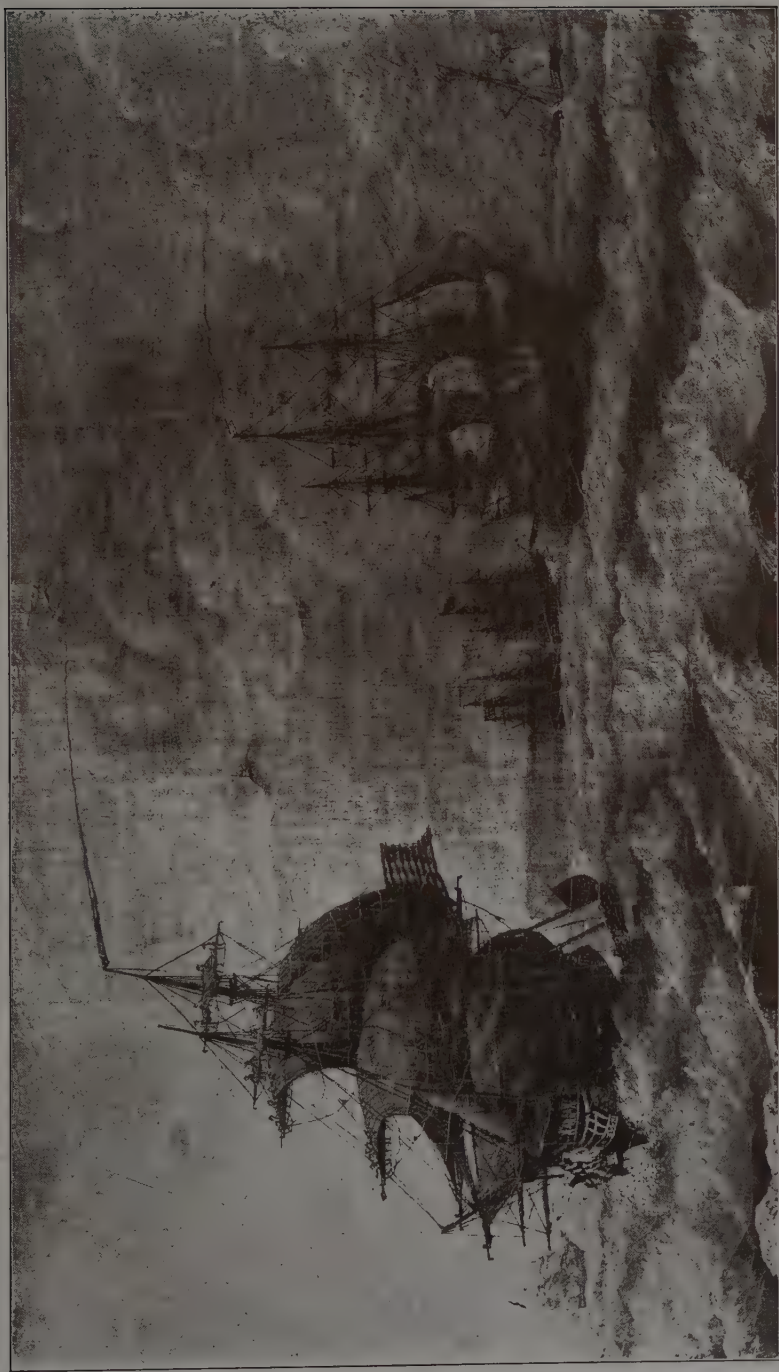
Burned off St. Paul's Island while on a voyage to Calcutta with a cargo of ice.



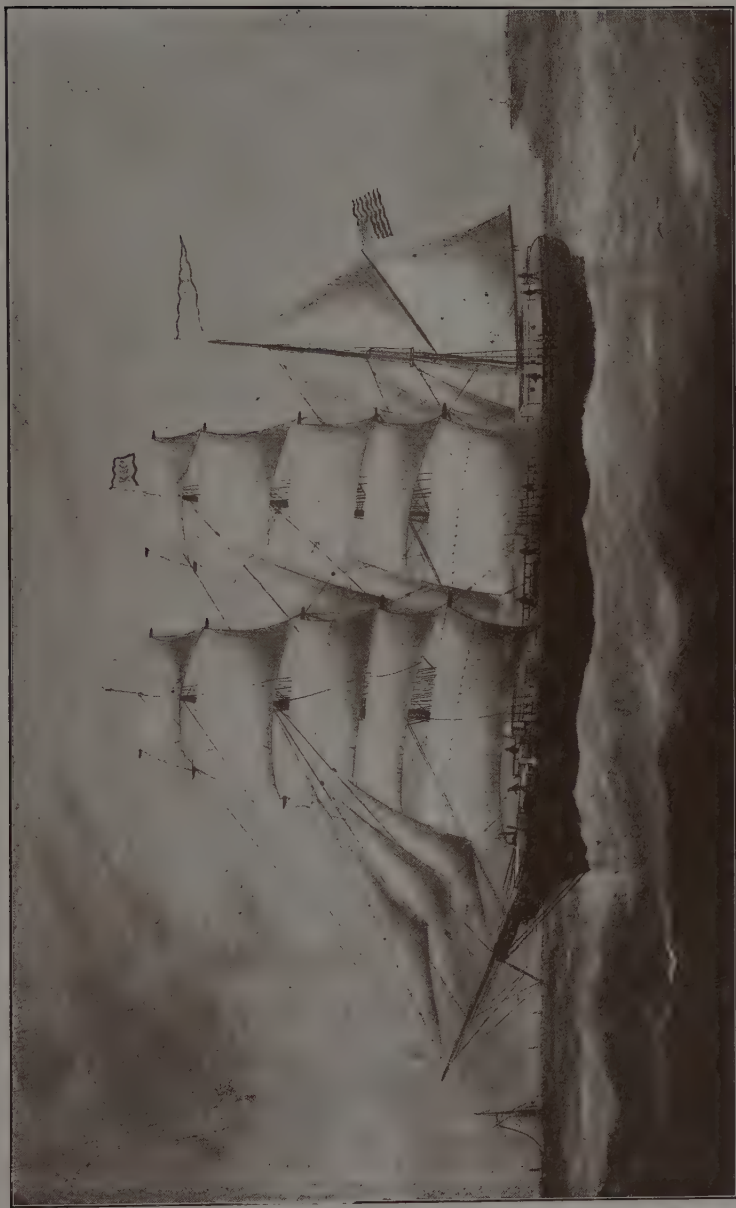
[453] BARKENTINE "MORNING STAR" OF BOSTON, 290 TONS, BUILT AT BATH, ME., IN 1884
From a photograph showing her laying at Lewis' Wharf, Boston.



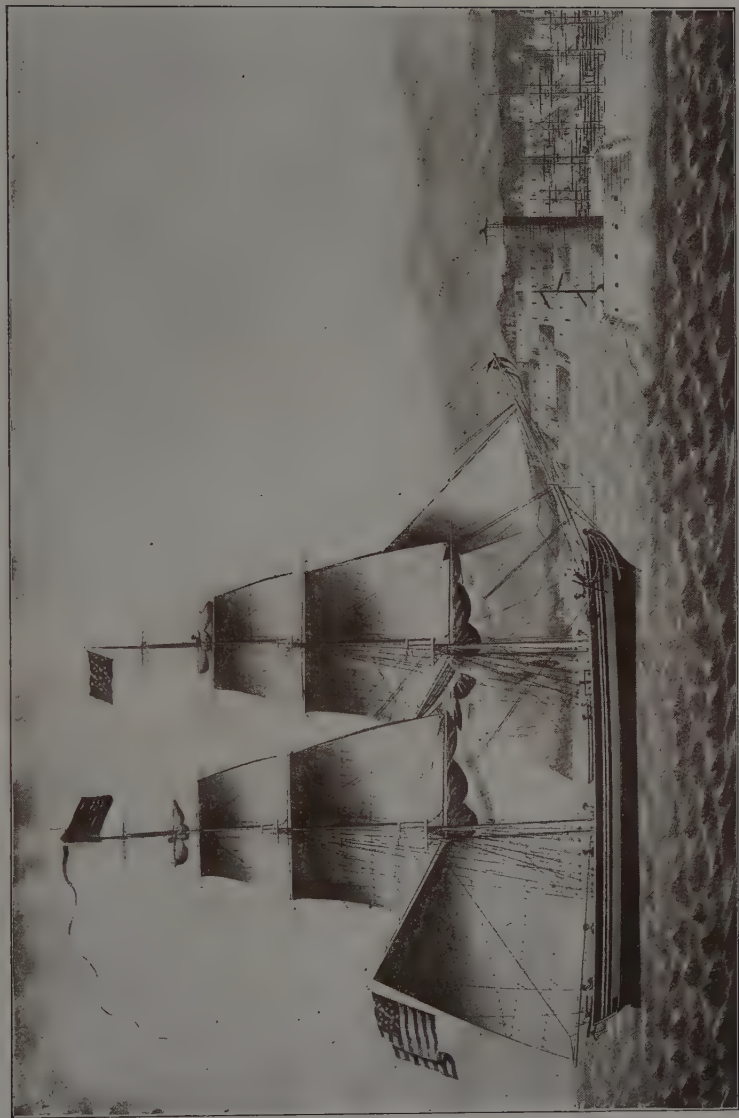
[454] BARK "MOSS ROSE" OF BOSTON, 797 TONS, BUILT IN NEW BRUNSWICK IN 1863



[455] SHIP "MOUNT VERNON" OF SALEM, 355 TONS, BUILT AT SALEM IN 1798
From an oil painting by Corné, showing the ship at Gibraltar in 1799.



[456] BARK "NANNIE T. BELL" OF BOSTON, 405 TONS, BUILT AT NEW YORK IN 1865
From a painting by Ed. Adam, Havre, 1873.



[457] BRIG "NAVARINO" OF BOSTON, 249 TONS, BUILT AT NEW YORK IN 1827

From a watercolor showing her entering Palermo, Oct. 15, 1829.



Photograph by George E. Noyes, Newburyport

[458] HERMAPHRODITE BRIG "NEDWHITE" OF BELFAST, ME., 550 TONS,
BUILT AT BELFAST, MAINE, IN 1874.
Lost on the Island of Martinique, W. I.

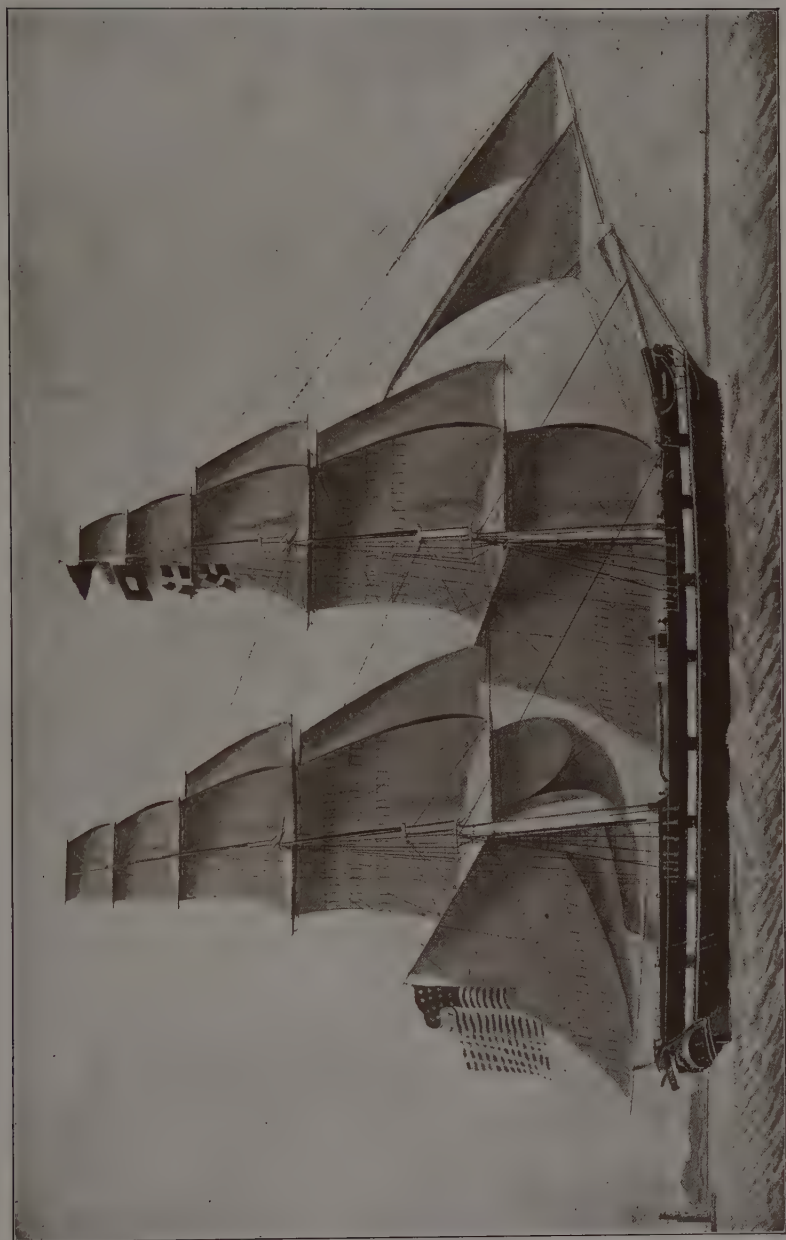


[459] BARK "OBED BAXTER" OF BOSTON, 877 TONS, BUILT AT NEWBURY-
PORT IN 1876



[460] BRIG "NEPTUNE" OF BOSTON, 196 TONS, BUILT AT DUXBURY IN 1829

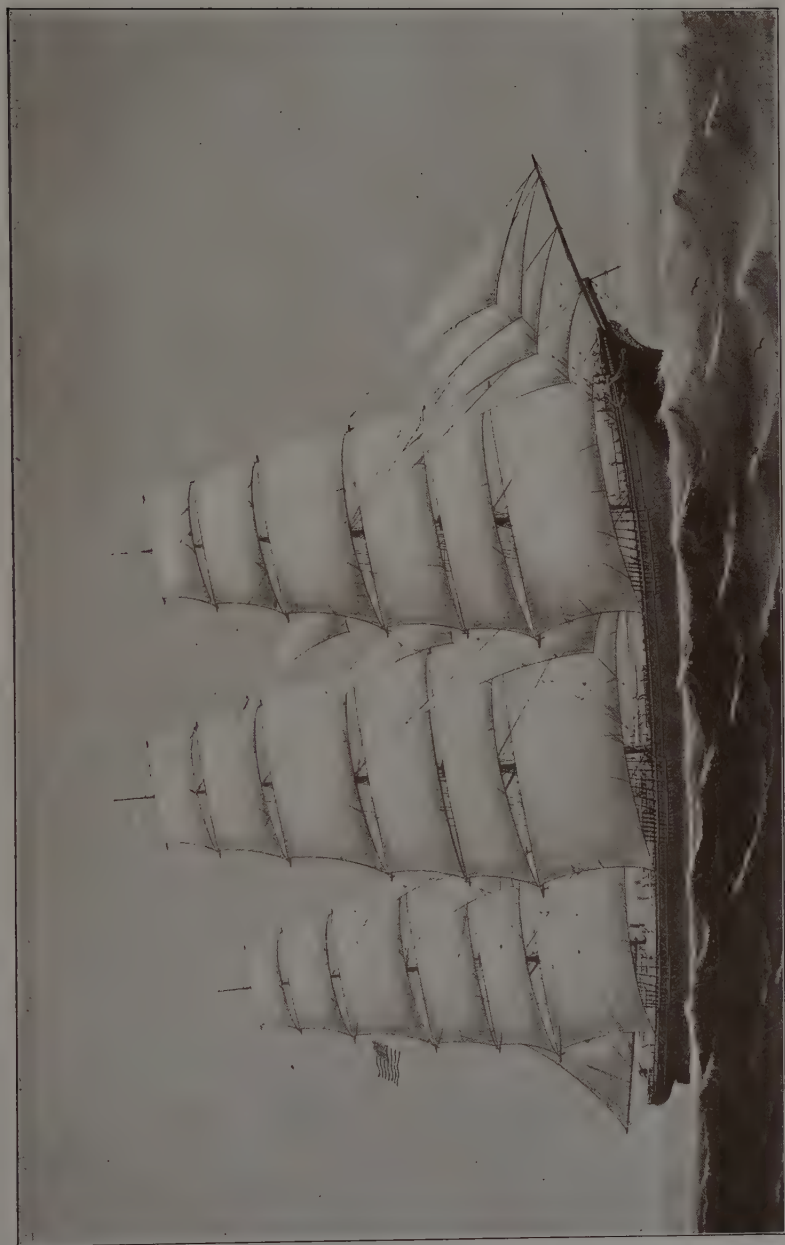
From a watercolor by Hré Pellegrin, Marseilles.



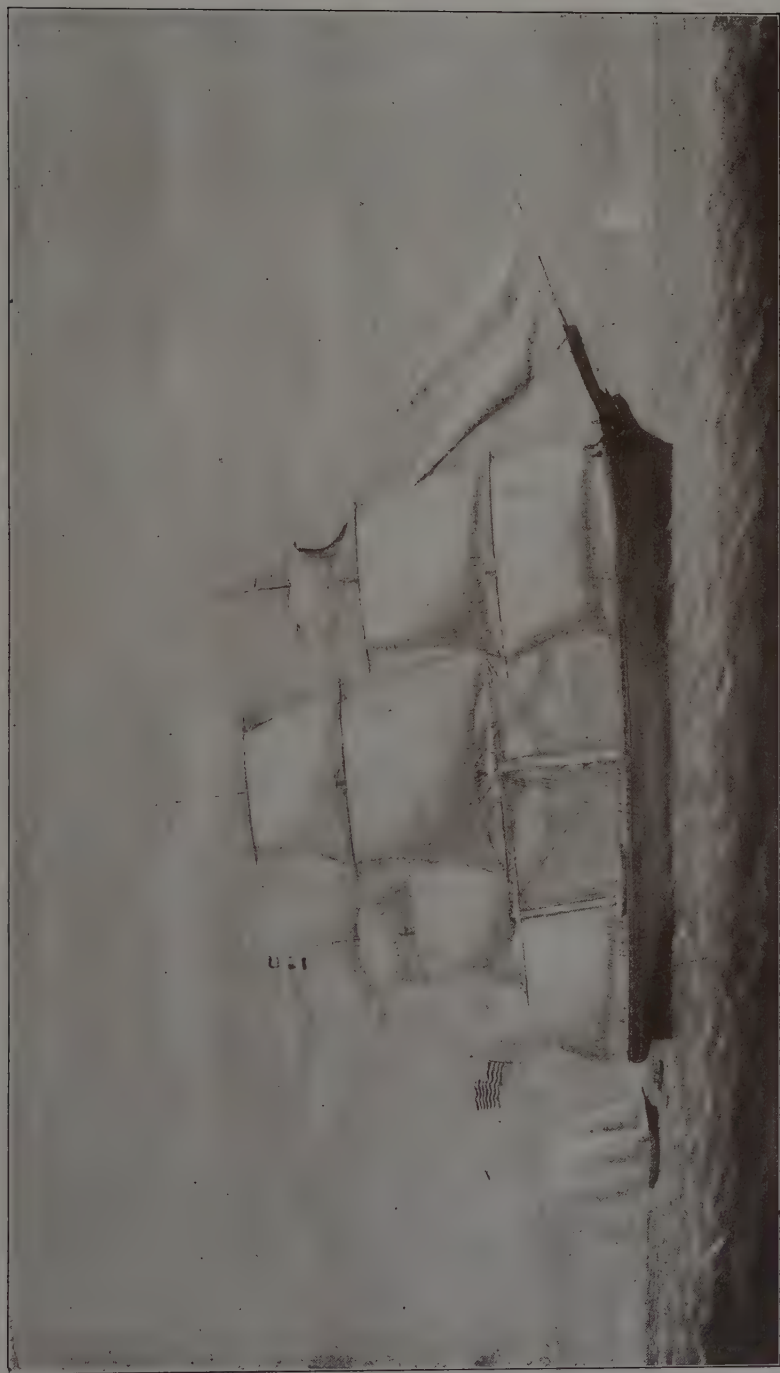
[461] BRIG "NEREUS" OF BOSTON, BUILT AT DUXBURY IN 1829
From a watercolor by Peter Mazzinghi, Leghorn.



[462] BRIG "NEW HAZARD" OF SALEM, 281 TONS, BUILT AT NEWBURY IN 1809
From a watercolor by George Ropes, Nov. 1810.



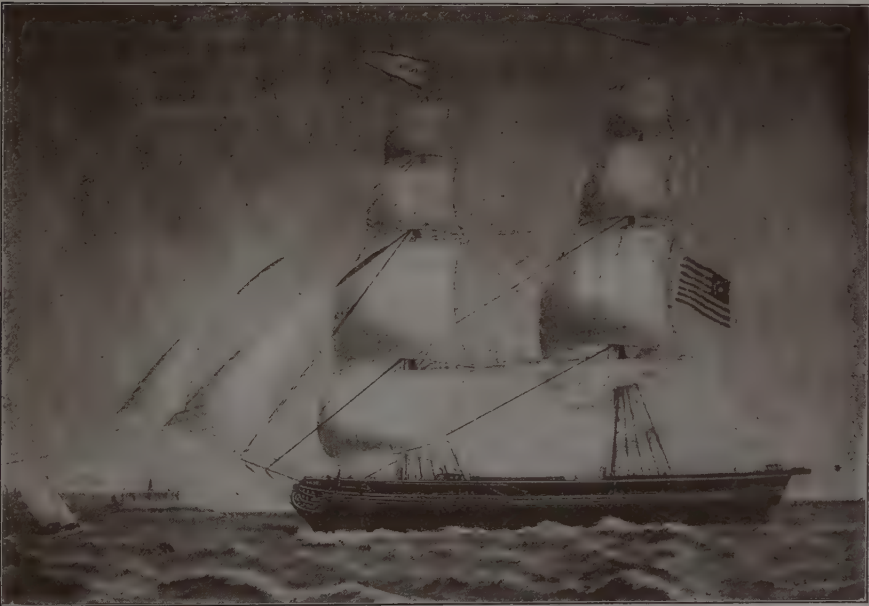
[463] CLIPPER SHIP "NORTH AMERICA" OF BOSTON, 1463 TONS, BUILT AT EAST BOSTON IN 1851
From an oil painting by Lai Fong, Calcutta, 1890.



[464] CLIPPER SHIP "NORTHERN LIGHT" OF BOSTON, 1021 TONS, BUILT AT SOUTH BOSTON IN 1851

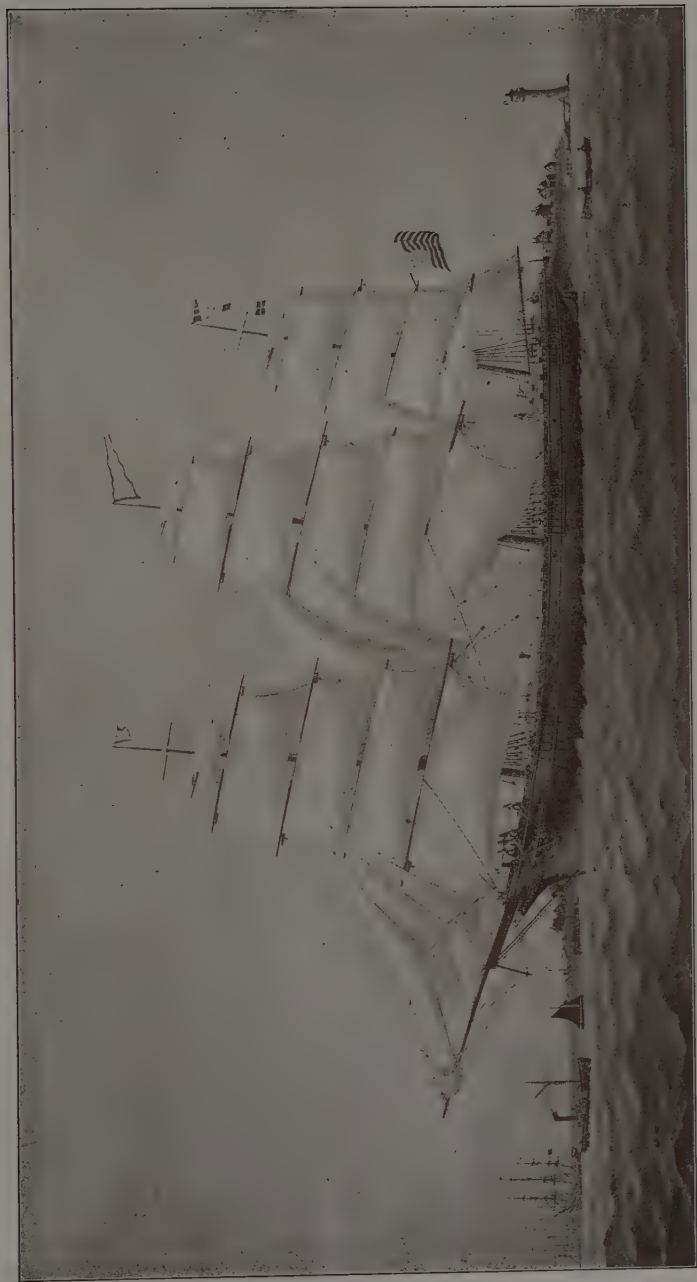


[465] CLIPPER SHIP "OCEAN EXPRESS" OF BOSTON, 1699 TONS, BUILT AT MEDFORD IN 1855

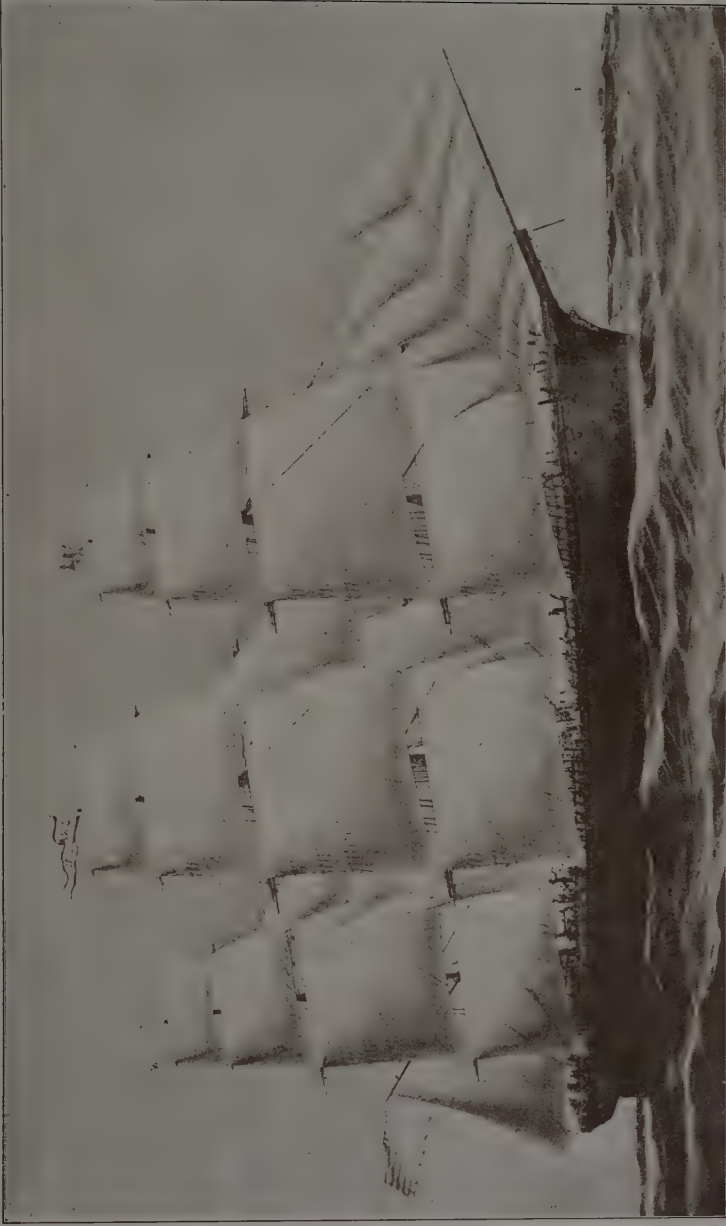


Photograph by George E. Noyes, Newburyport

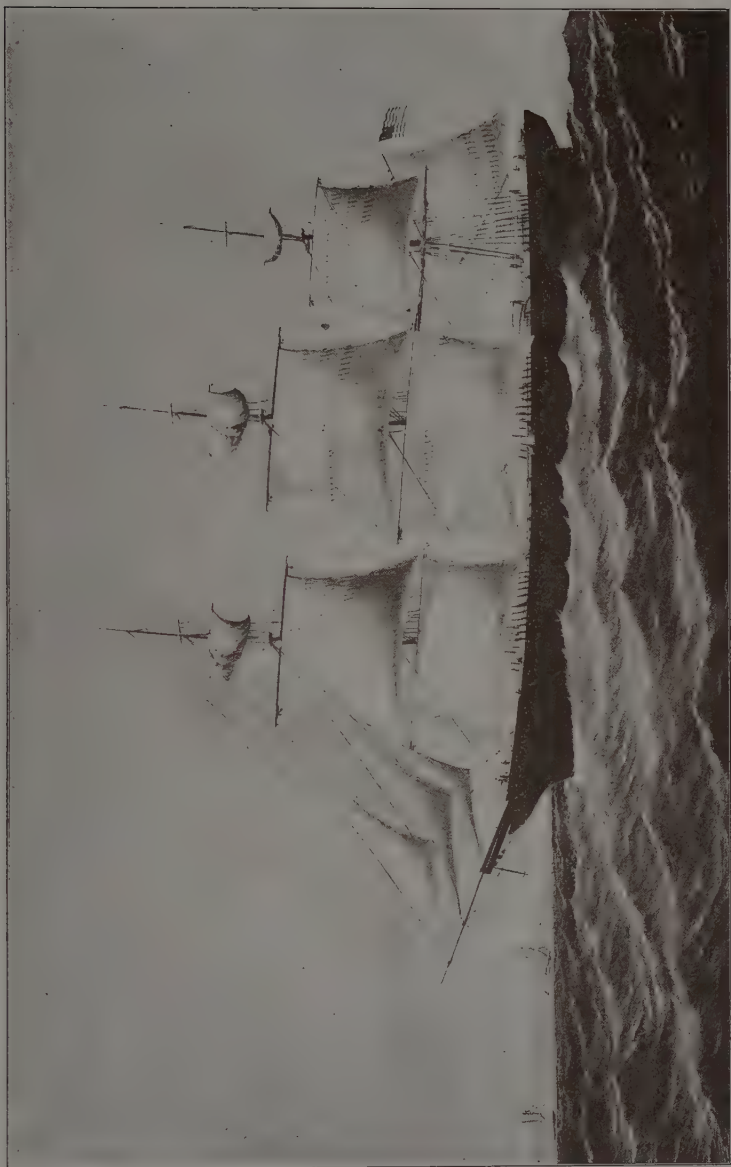
[466] BRIG "PARIS" OF BOSTON, 356 TONS, BUILT AT MEDFORD IN 1828
From a painting by Jacob Petersen, Copenhagen, 1835



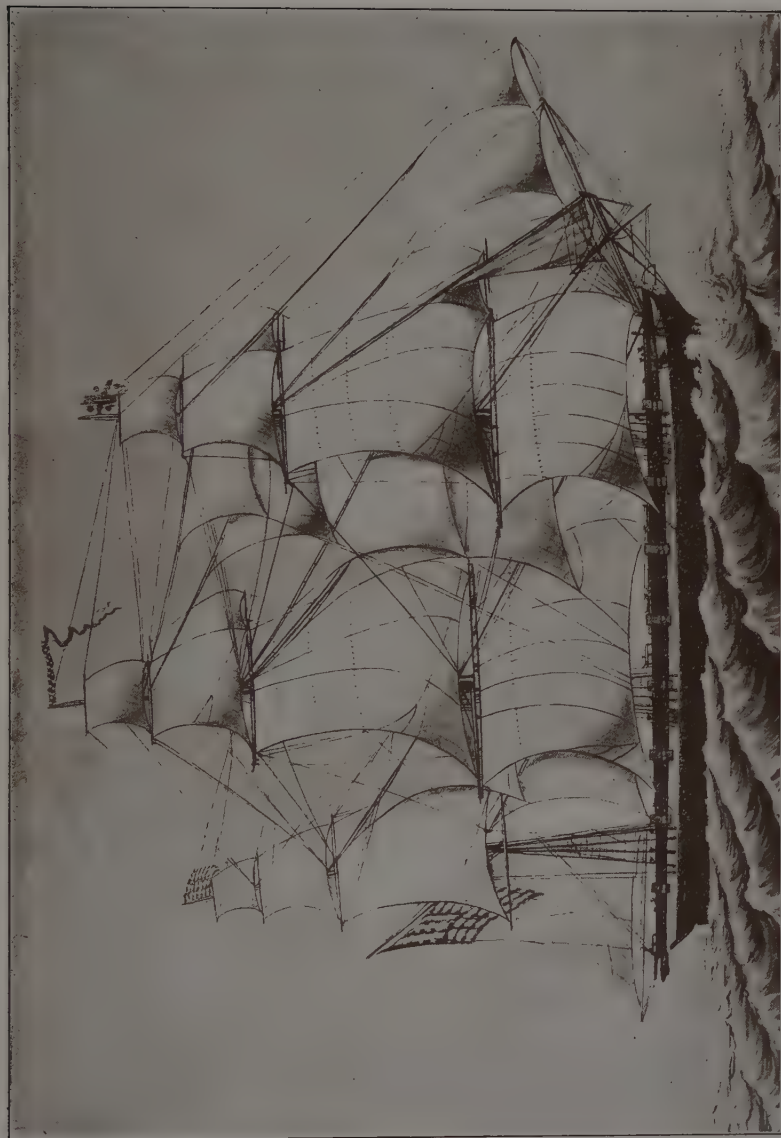
[467] SHIP "OCEAN QUEEN" OF NEWBURYPORT, 824 TONS, BUILT AT NEWBURYPORT IN 1847
From an oil painting by C. S. Raleigh, 1884.



[468] SHIP "ORACLE" OF THOMASTON, ME., 1196 TONS, BUILT AT THOMASTON IN 1853



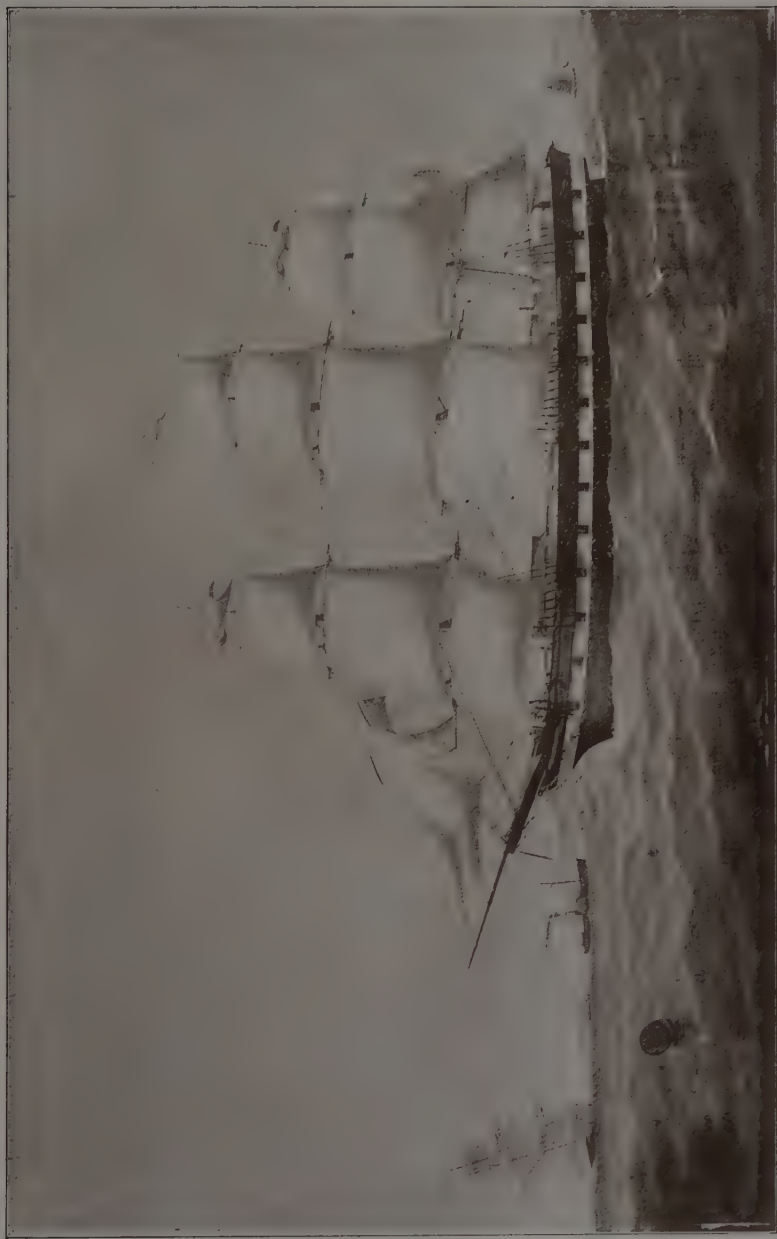
[462] CLIPPER SHIP "ORIENTAL" OF BOSTON, 1654 TONS, BUILT AT EAST BOSTON IN 1853



[470] SHIP "PACKET" OF SALEM, 229 TONS, BUILT AT PORTLAND, MAINE, IN 1803
From a watercolor by George Ropes, 1814.



[471] SHIP "PANAY" OF SALEM, 1190 TONS, BUILT AT EAST BOSTON IN 1877
Wrecked on the island of Samara in the Philippines, July 12, 1890. Photograph by N. L. Stebbins.

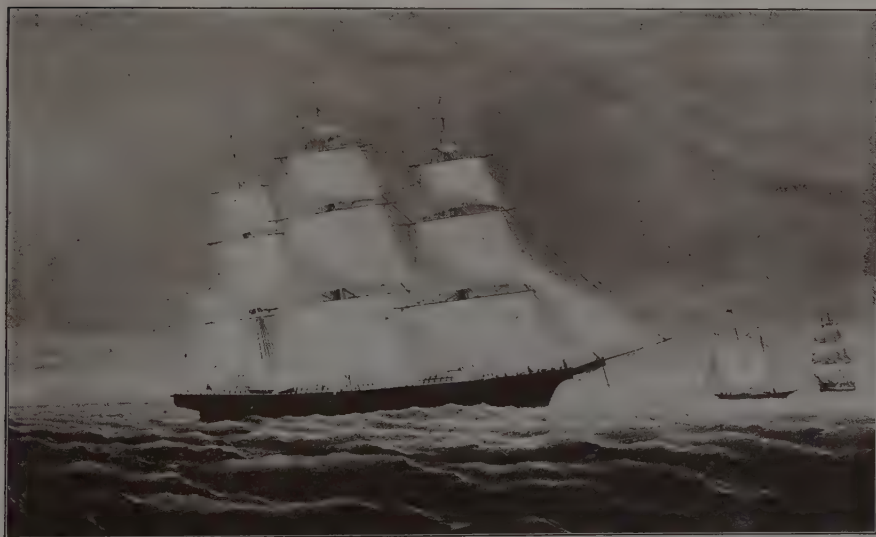


[472] SHIP "PARTHENIA" OF NEWBURYPORT, 849 TONS, BUILT AT NEWBURYPORT IN 1852



[473] SCHOONER "PETER H. CROWELL" OF DENNIS, 445 TONS, BUILT AT EAST BOSTON IN 1873

Photograph by N. L. Stebbins.



[474] CLIPPER SHIP "PHANTOM" OF BOSTON, 1174 TONS, BUILT AT MEDFORD IN 1852



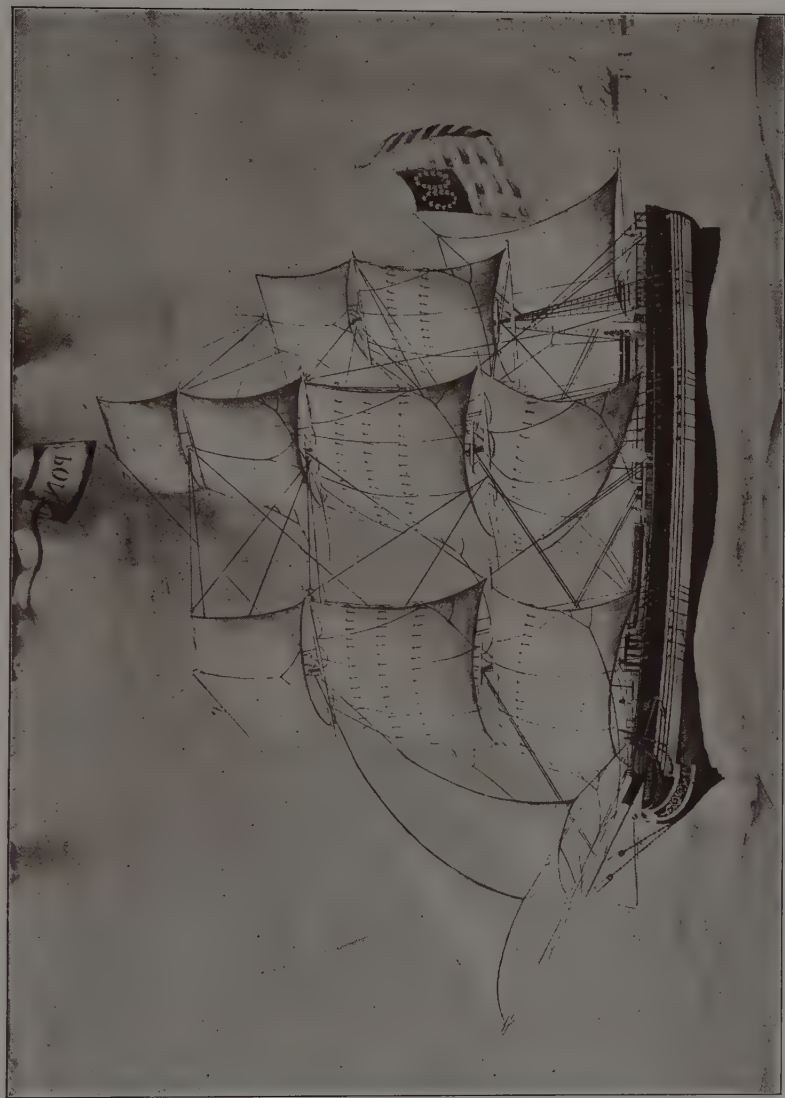
[475] SCHOONER "POLLY" OF BELFAST, ME., 48 TONS, BUILT AT AMESBURY
IN 1805

From a photograph showing her lying in the Merrimac river near Amesbury. Supposed to be the oldest schooner still afloat.



Photograph by George E. Noyes, Newburyport

[476] UNITED STATES BRIG "PORPOISE", 224 TONS, BUILT AT BOSTON IN 1836



[477] SHIP "PONTIAC" OF BOSTON, 538 TONS, BUILT BY SAMUEL BADGER IN 1838

From a watercolor showing her leaving Havre, May 26, 1839.



[478] BARK "POTOMAC" OF BOSTON, 272 TONS, BUILT AT DUXBURY IN 1833



Photograph by George E. Noyes, Newburyport

[479] SHIP "PRIMA DONNA" OF NEW YORK, 1400 TONS, BUILT AT MYSTIC, CONN. IN 1858



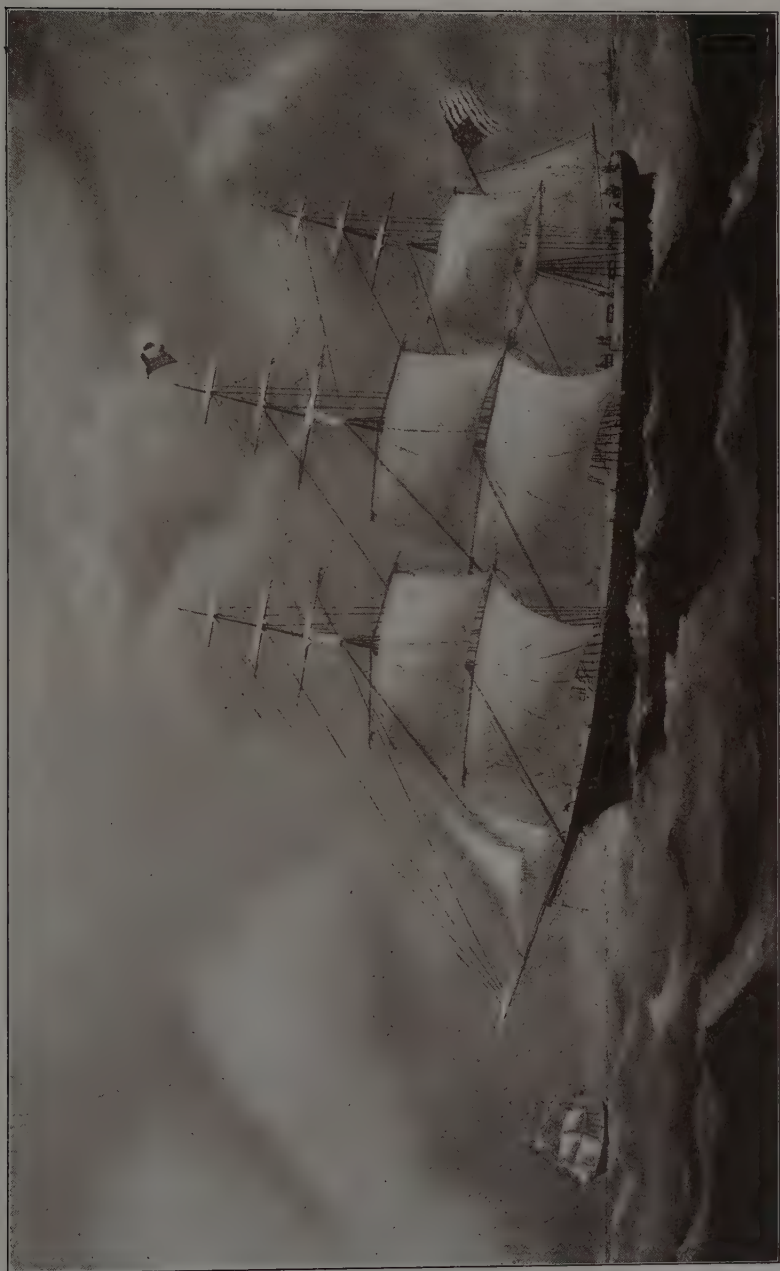
[480] BARK "PRINCETON" OF NEW HAVEN, CONN., 296 TONS, BUILT AT NEW HAVEN IN 1852



[481] SHIP "PROGRESS" OF NEW BEDFORD, 340 TONS, BUILT AT WESTERLY,
R. I. IN 1843
A typical New Bedford whaler.



[482] SHIP "PROGRESS" OF NEW BEDFORD, 340 TONS, BUILT AT WESTERLY,
R. I. IN 1843
From an early photograph showing her hauled up for repairs.



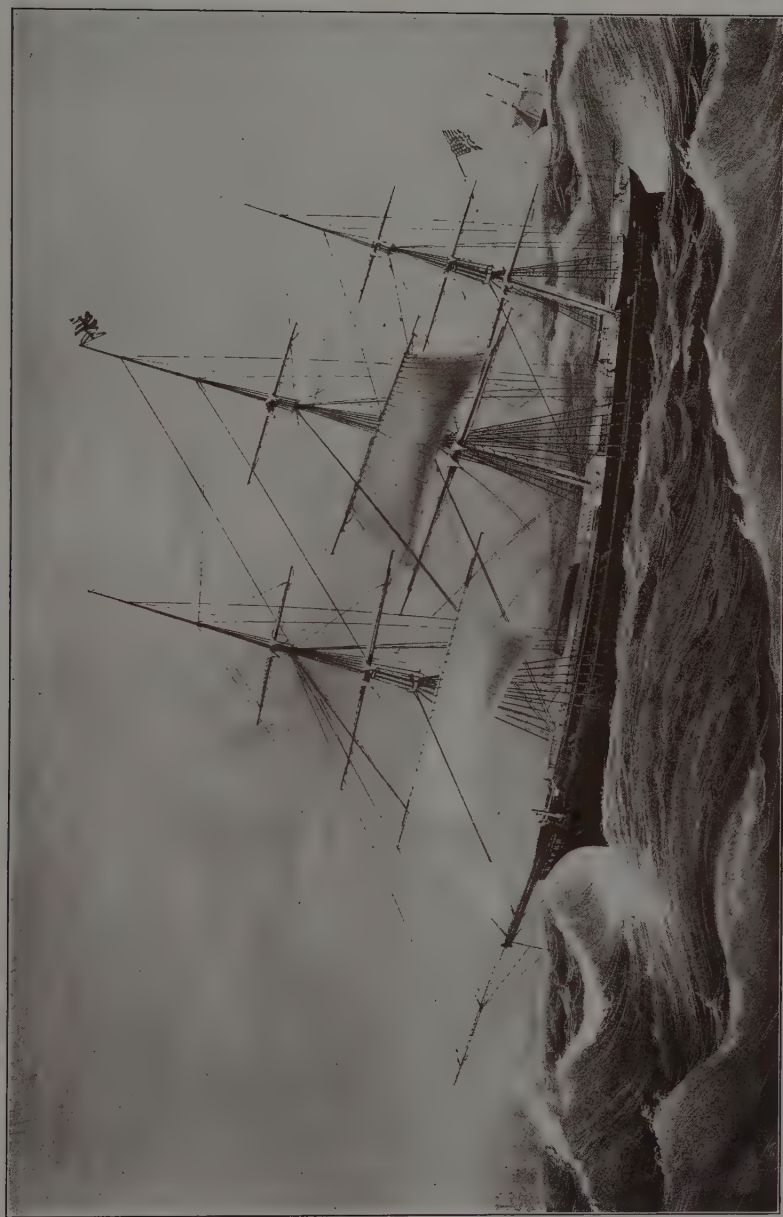
[483] CLIPPER SHIP "QUEEN OF CLIPPERS" OF NEW YORK, 2360 TONS, BUILT AT EAST BOSTON IN 1853



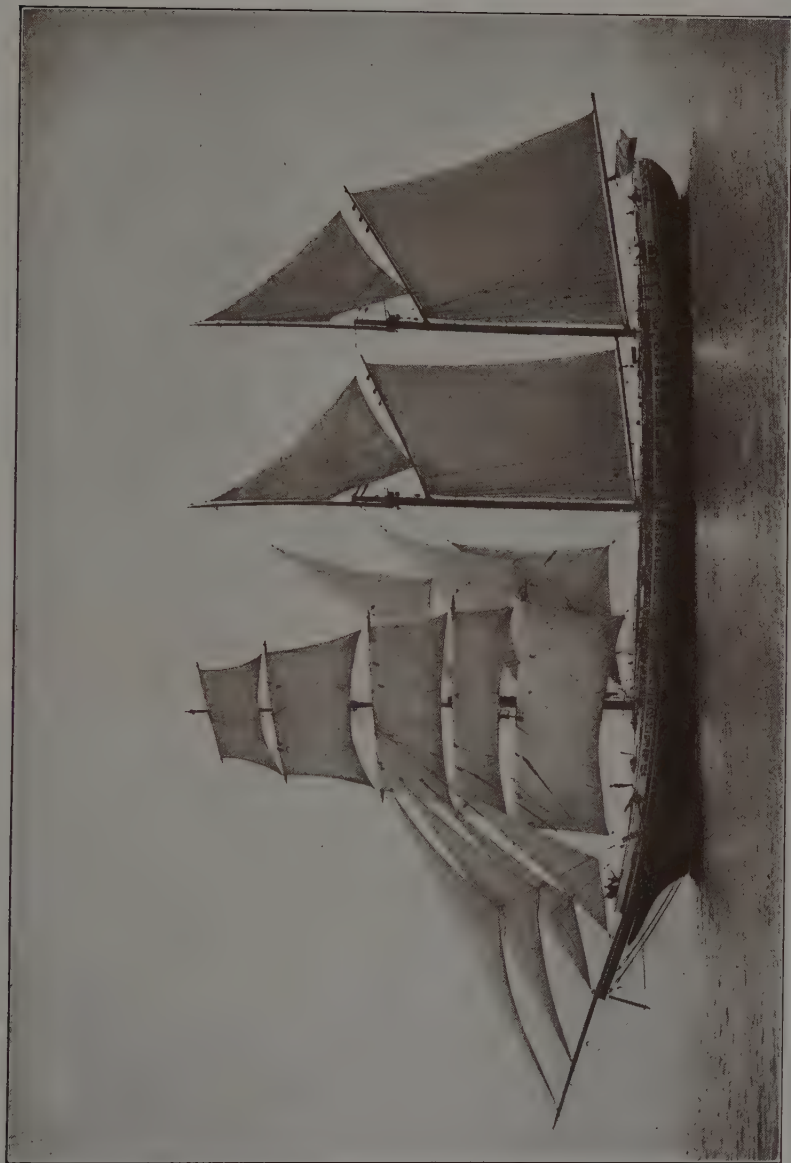
[484] SHIP "R. D. RICE" OF THOMASTON, ME., 2134 TONS, BUILT AT THOMASTON, ME., IN 1883



[485] BARK "RAKAIA" OF BOSTON, 986 TONS, BUILT AT SUNDERLAND ENGLAND, IN 1873
Name changed to "Ruth Stark".



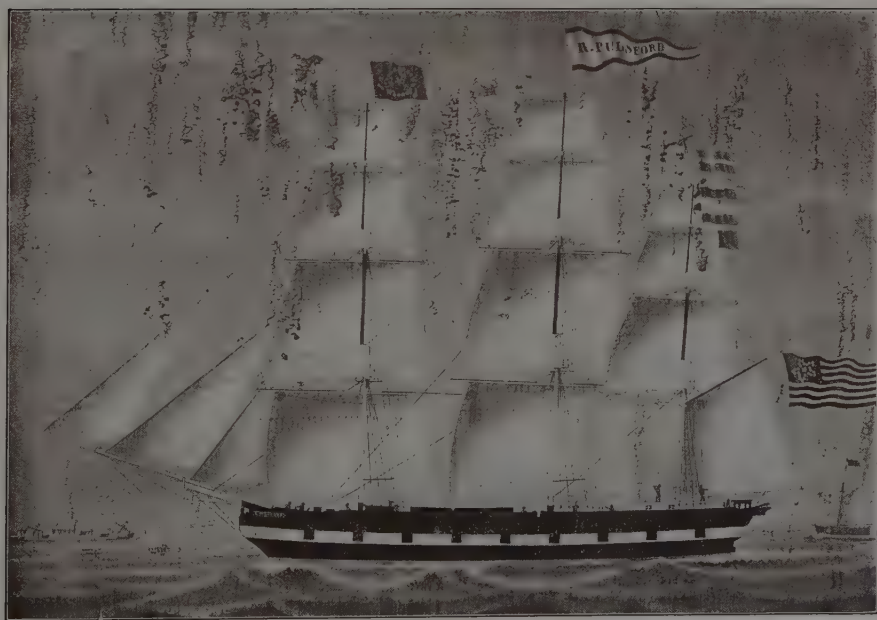
[486] CLIPPER SHIP "RACER" OF NEW YORK, 1669 TONS, BUILT AT NEWBURY IN 1851



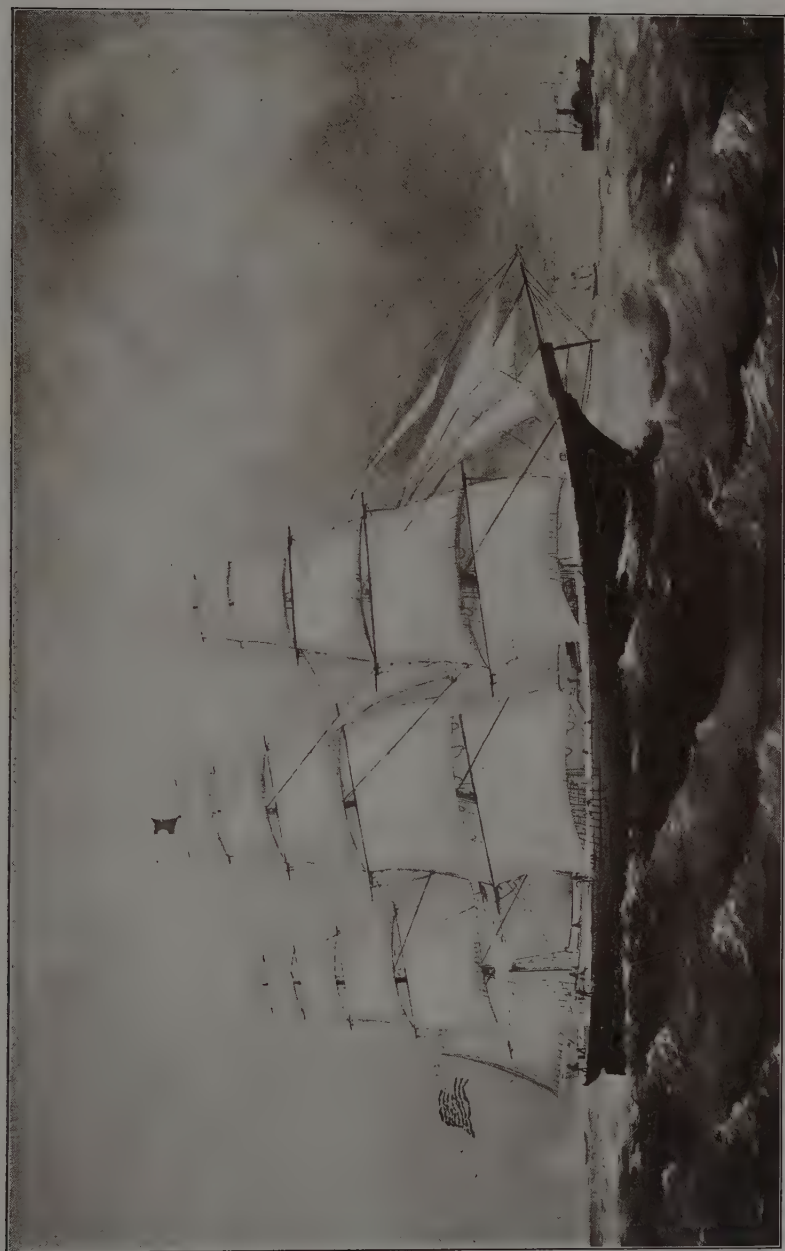
[487] BARKENTINE "RACHIEL EMERY" OF BOSTON, 640 TONS, BUILT AT WALDOBOROUGH, ME. IN 1883
From a photograph by N. L. Stebbins.



[488] HERMAPHRODITE BRIG "RAPID TRANSIT" OF TURK'S ISLAND, 233
TONS, BUILT AT NORTH WEYMOUTH IN 1879
Lost at sea in 1885. From a photograph by N. L. Stebbins.



[489] SHIP "ROBERT PULSFORD" OF LYNN, 406 TONS
From a painting on glass by P. Weytz, Antwerp.



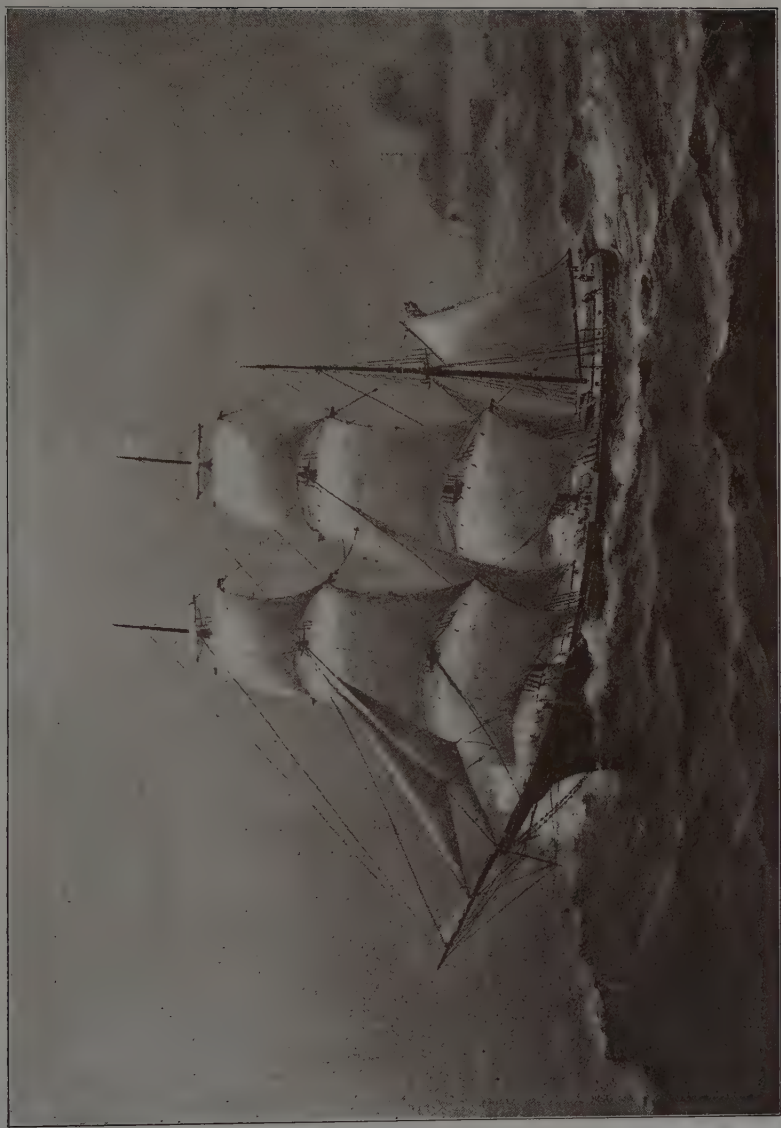
[490] CLIPPER SHIP "RED JACKET" OF LIVERPOOL, ENG., 2006 TONS, BUILT AT ROCKLAND, MAINE, IN 1853



[491] SHIP "RESTITUTION" OF SALEM, 247 TONS, BUILT AT NEWBURY IN 1803
From a watercolor showing the vessel entering the port of Palermo, Aug. 22, 1833.



[492] SHIP "RHINE" OF BOSTON, 1556 TONS, BUILT AT GREENOCK, SCOTLAND
IN 1886



[493] BARK "ROEBUCK" OF BOSTON, 340 TONS, BUILT AT NEW YORK IN 1856
From an oil painting by Wm. F. Halsall.



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[494] SHIP "RUBICON" OF BOSTON, 487 TONS, BUILT AT MEDFORD IN 1835

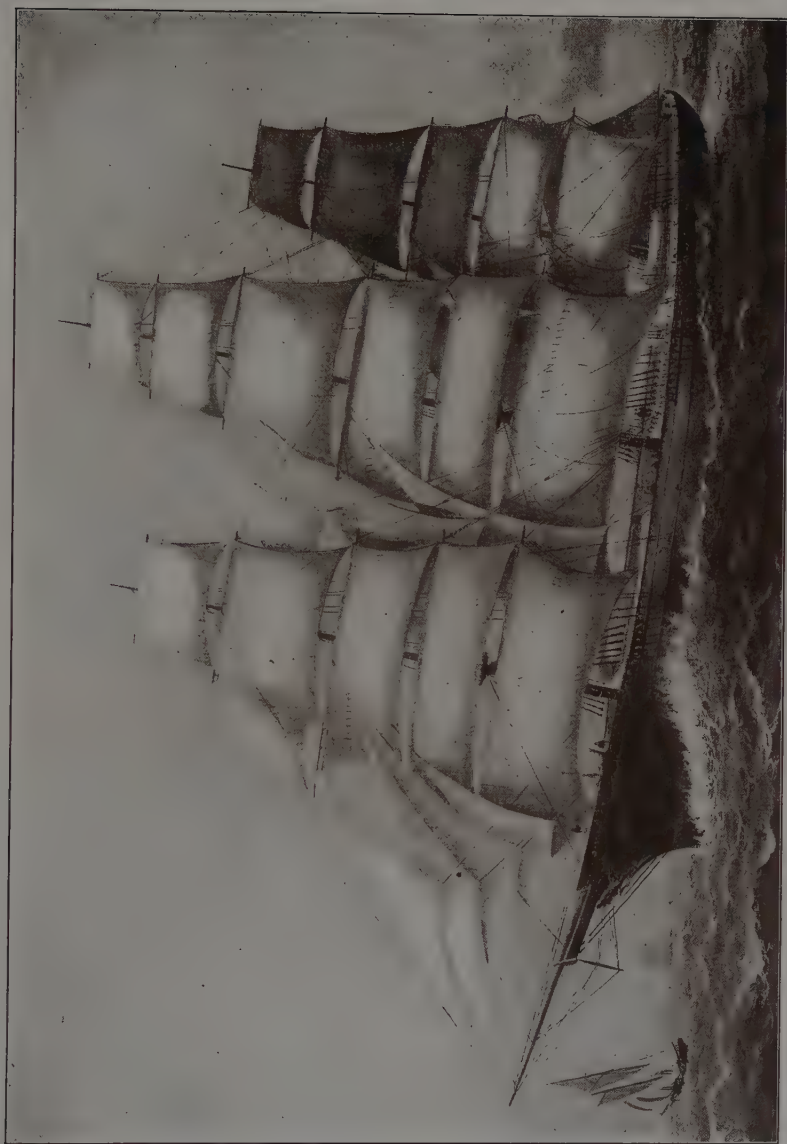
From a watercolor by Frederic Roux, Havre, 1837, showing the ship on Dec. 7, 1836, in a storm, three days out of Boston.



[495] ROCKPORT STONE SLOOP
From a photograph made about 1900.



[496] SHIP "ST. FRANCIS" OF SAN FRANCISCO, CAL., 1898 TONS, BUILT AT
BATH, ME., IN 1882



[497] SHIP "SACHEM" OF BOSTON, 1312 TONS, BUILT AT EAST BOSTON IN 1876



[498] SHIP "SACRAMENTO" OF BOSTON. 1418 TONS, BUILT AT EAST BOSTON
IN 1865

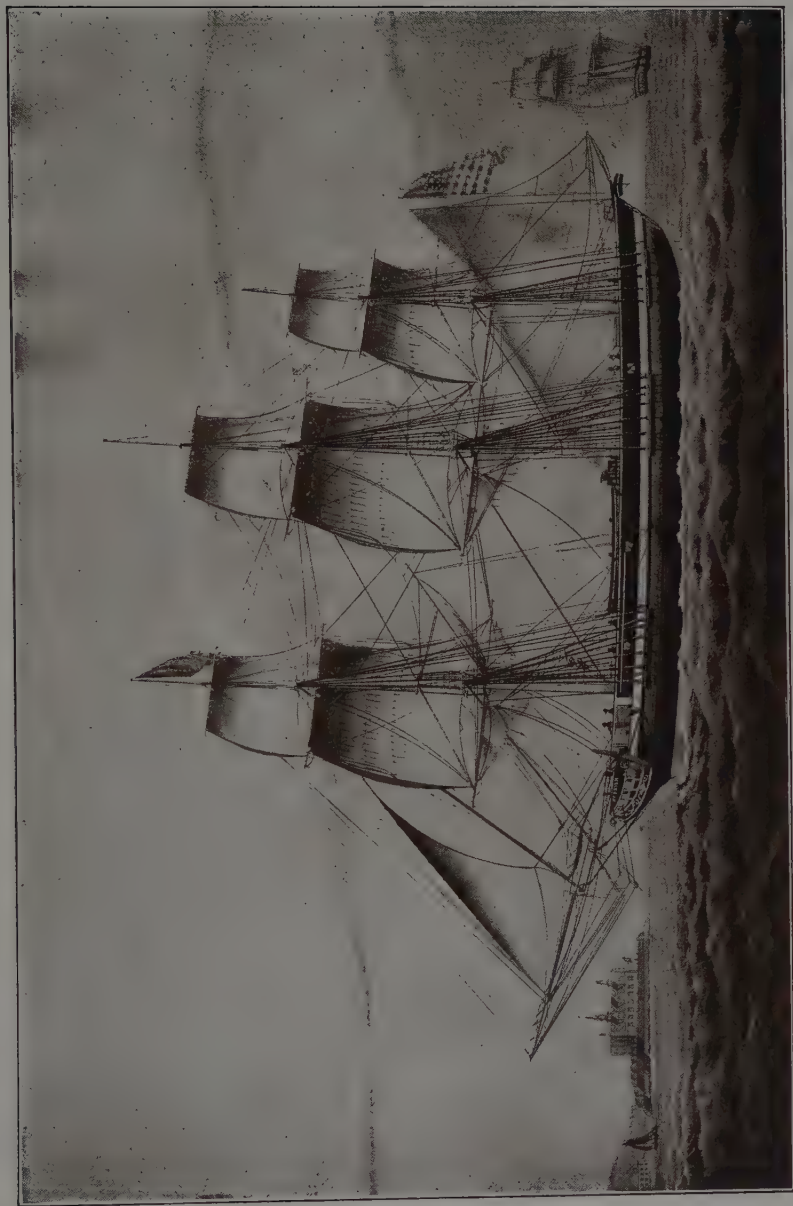
Wrecked Dec. 20, 1885 in the Straits of Macassar.



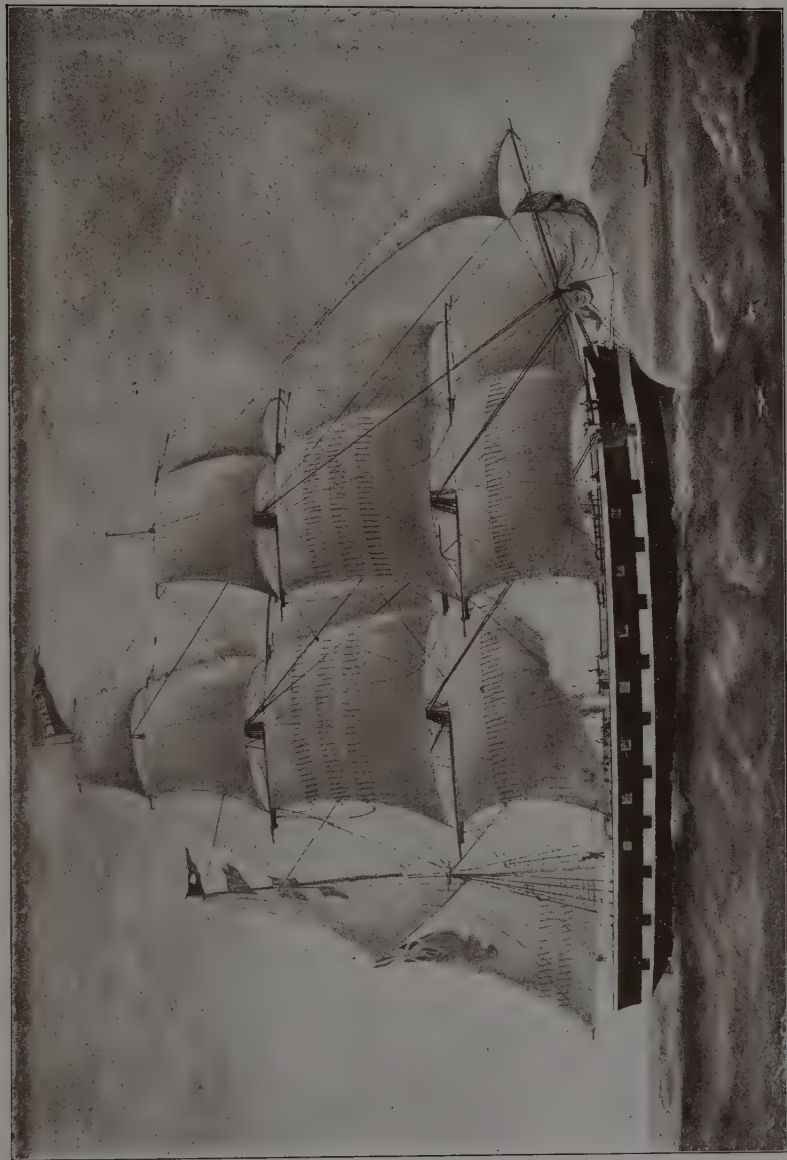
Photograph by George E. Noyes, Newburyport

[499] SHIP "SACRAMENTO" OF BOSTON. 1418 TONS, BUILT AT EAST BOSTON
IN 1865

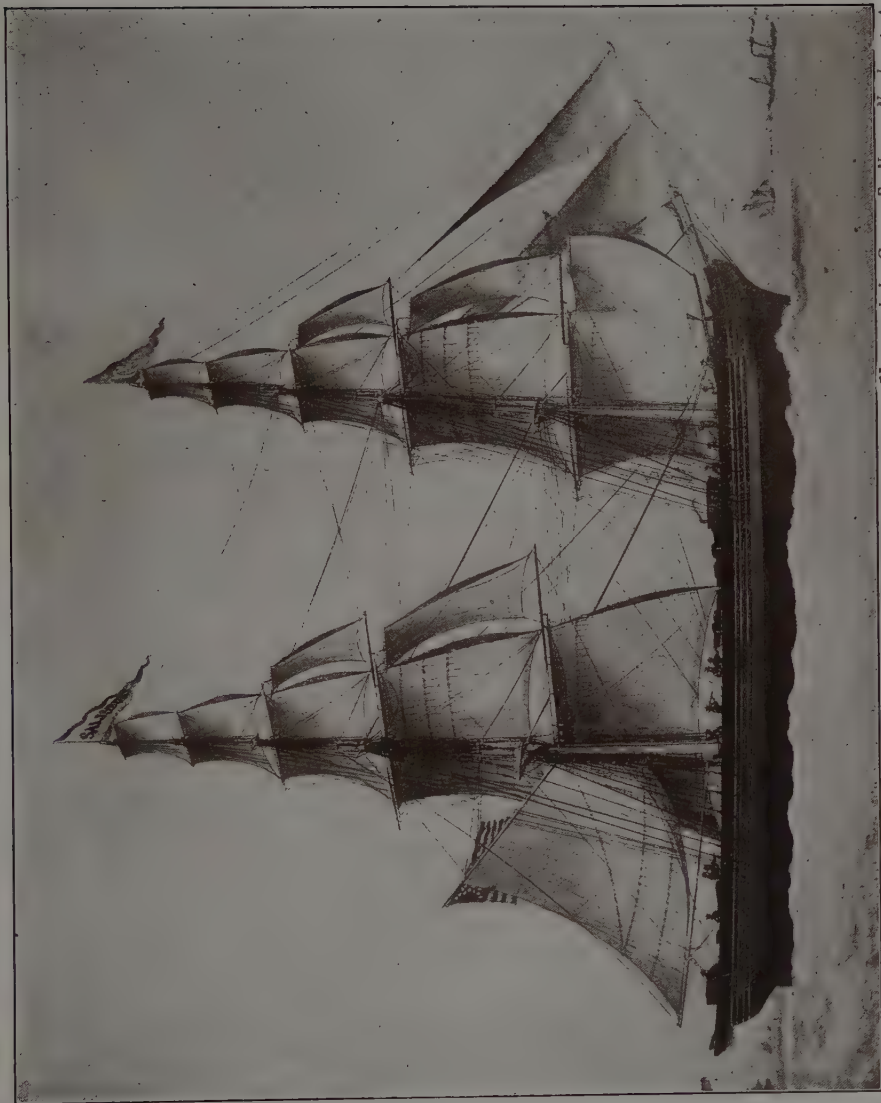
From a painting showing the ship leaving the Golden Gate, San Francisco, April 6, 1867.



[500] SHIP "ST. PETER" OF BOSTON, 266 TONS, BUILT AT SOUTH BOSTON IN 1822



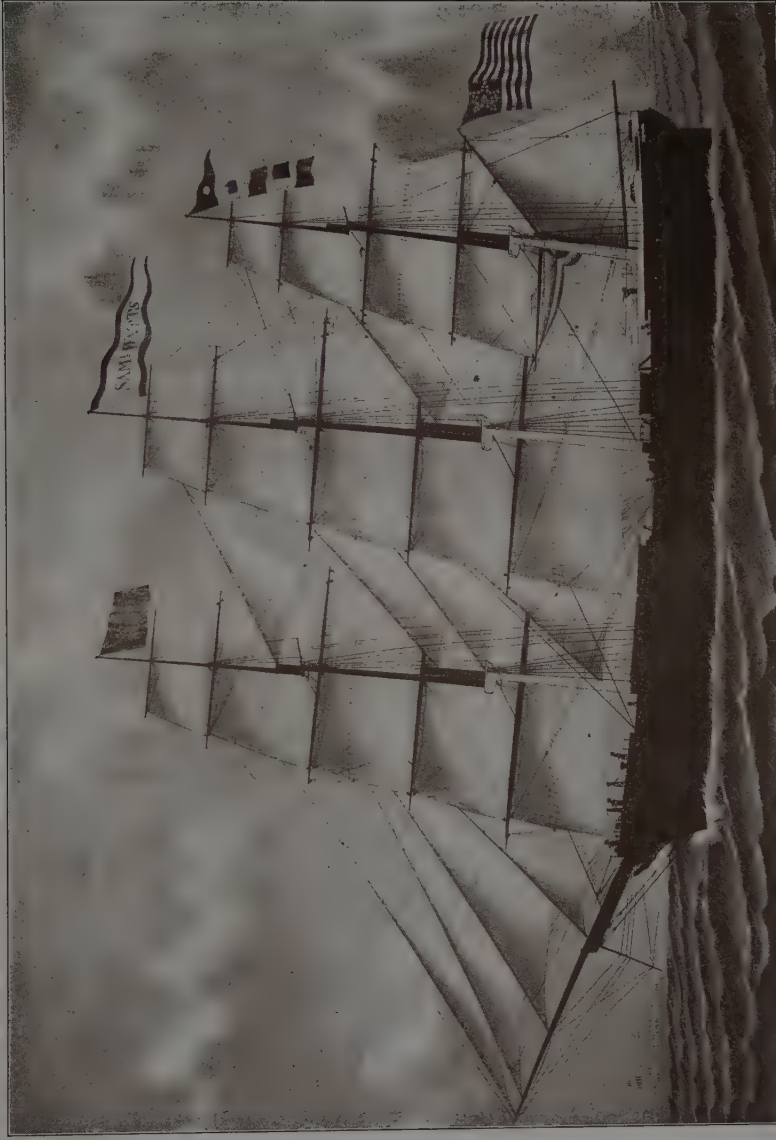
[501] BARK "SALEM" OF SALEM, 342 TONS, BUILT AT CINCINNATI, O. IN 1851
Sold to English owners in 1862.



Photograph by George E. Noyes, Newburyport

[502] BRIG "SALISBURY" OF NEWBURYPORT, 296 TONS, BUILT AT NEWBURYPORT IN 1844

From a watercolor by Frederic Roux, Havre.



[503] SHIP "SAMUEL WATTS" OF THOMASTON, MAINE, 1248 TONS, BUILT AT THOMASTON IN 1855
From a painting by P. Weytz, Antwerp.



[504] CLIPPER SHIP "SANCHO PANZA" OF BOSTON, 876 TONS, BUILT AT
MEDFORD IN 1853



[505] CLIPPER SHIP "SANCHO PANZA" IN A STORM

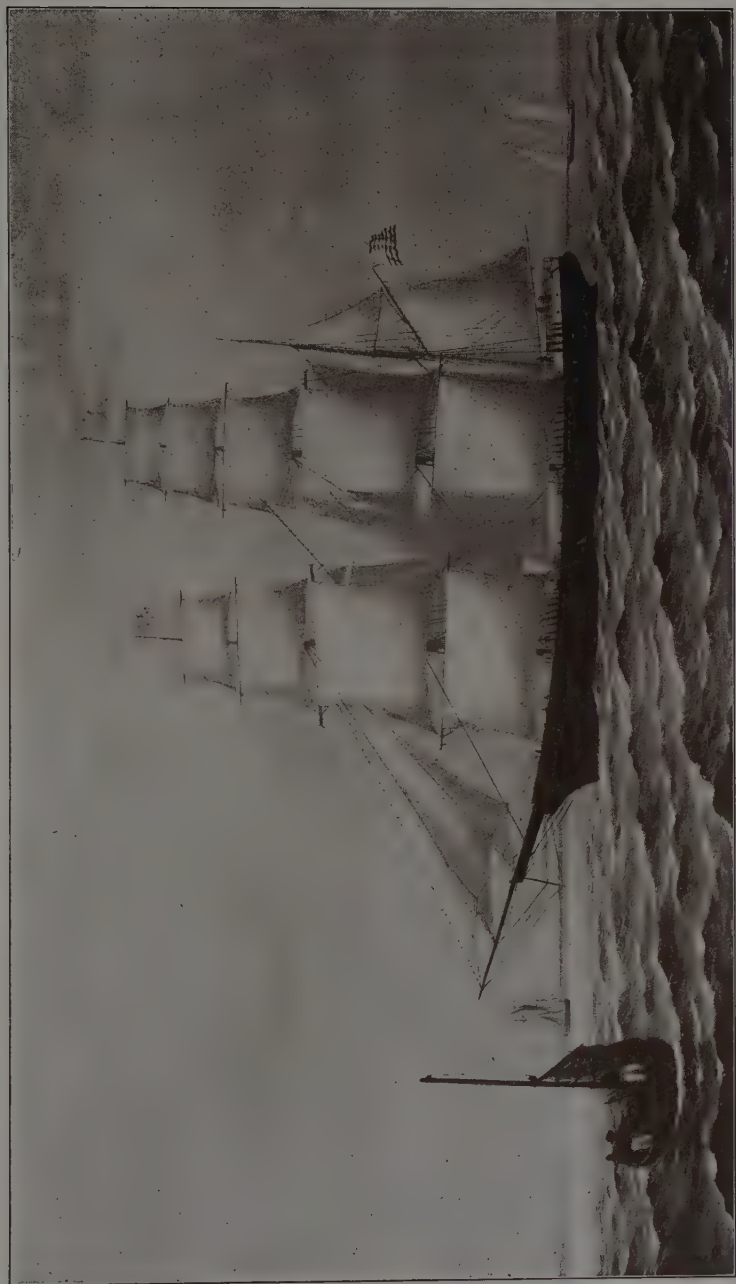


[506] BARK "SARAH" OF BOSTON, 628 TONS, BUILT AT BOSTON IN 1867



Photograph by George E. Noyes, Newburyport

[507] SHIP "SARAH NEWMAN" OF NEWBURYPORT, 899 TONS, BUILT AT NEWBURYPORT IN 1857



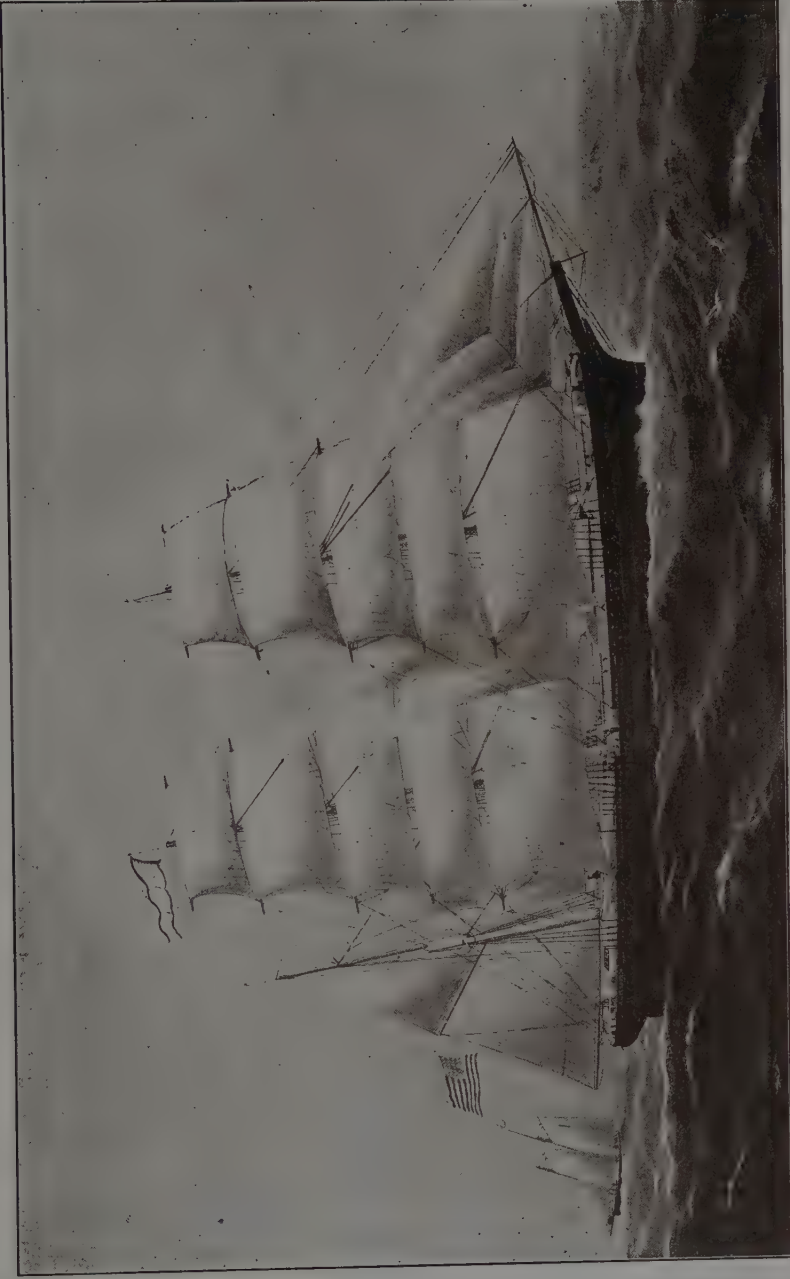
[508] BARK "SMYRNIOTE" OF BOSTON, 397 TONS, BUILT AT DUXBURY IN 1859



[509] SHIP "SNOW AND BURGESS" OF NEW YORK, 1655 TONS, BUILT AT THOMASTON, ME., IN 1878



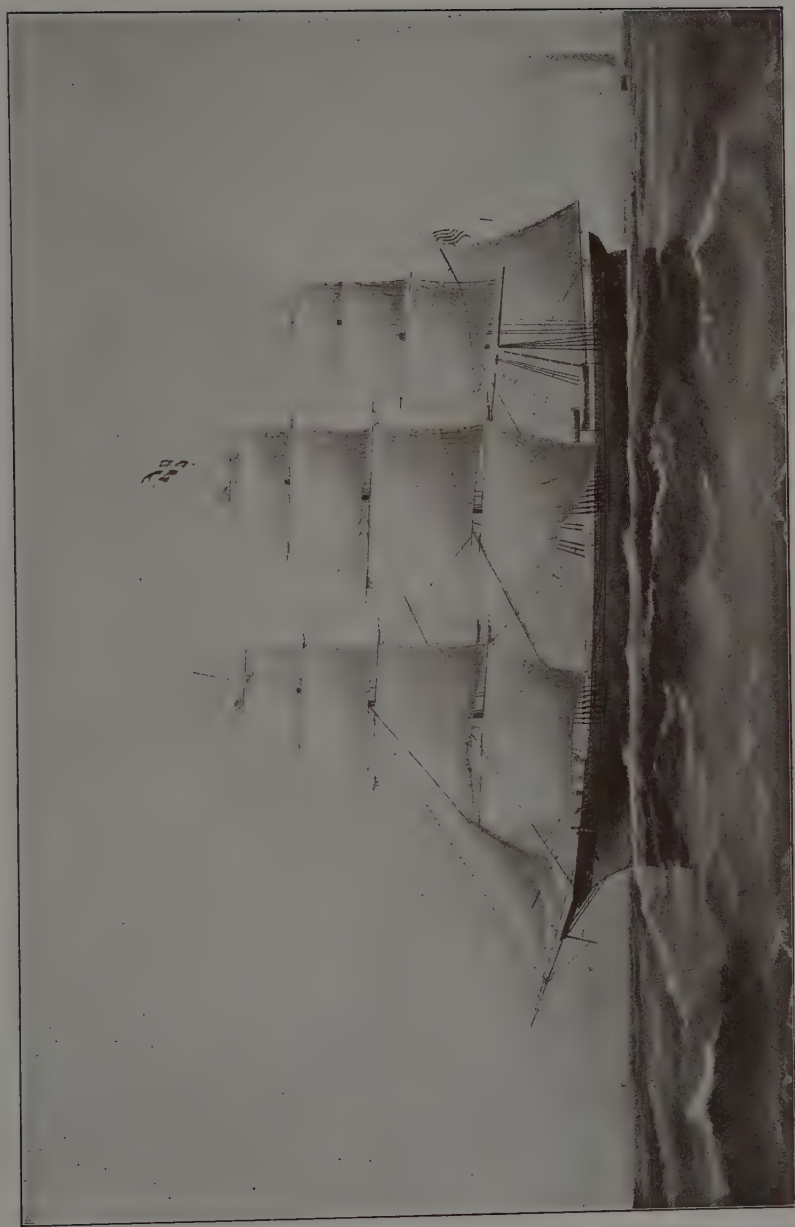
[510] BRIG "SUFFOLK" OF BOSTON, 261 TONS, BUILT AT MEDFORD IN 1824



[511] BARK "SOLOMON" OF BOSTON, 728 TONS, BUILT AT KINGSTON, MASS. IN 1866



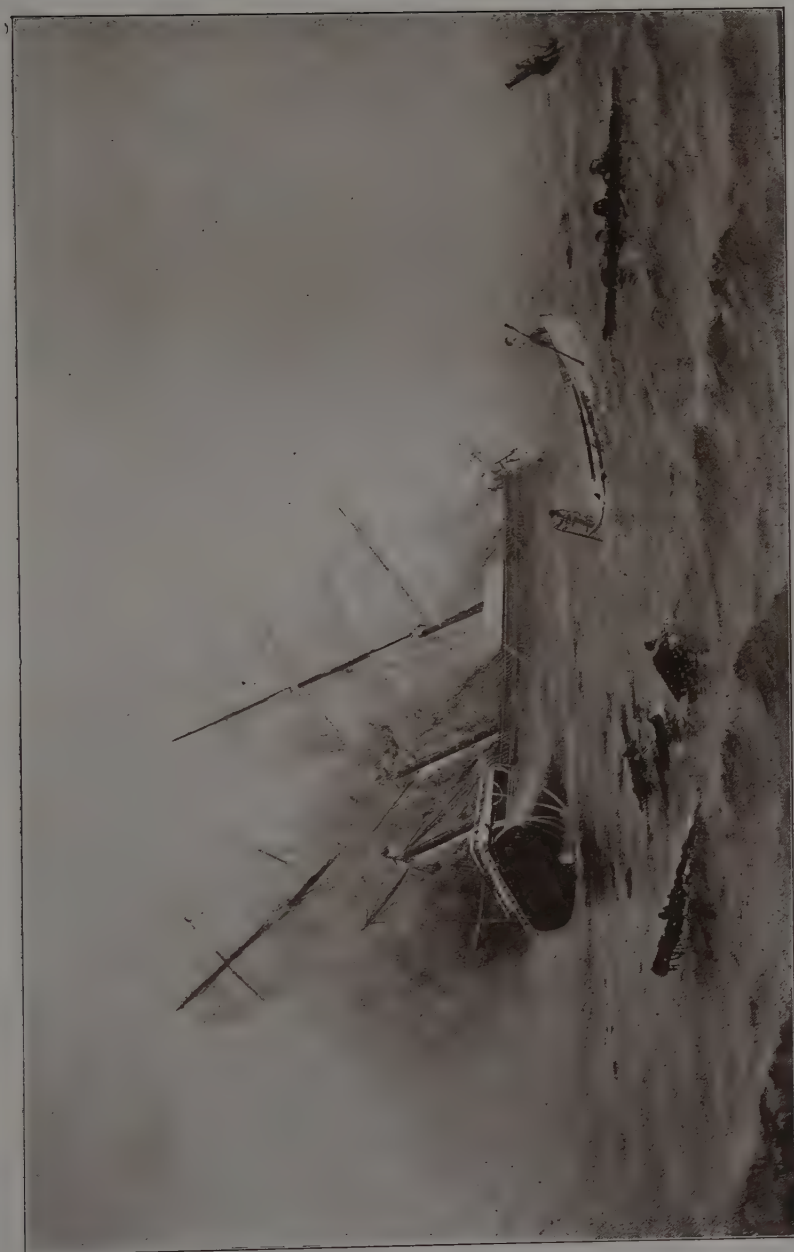
[512] CLIPPER SHIP "SOUTHERN CROSS" OF BOSTON, 950 TONS, BUILT AT BOSTON IN 1851



[513] CLIPPER SHIP "SOVEREIGN OF THE SEAS" OF NEW YORK, 2421 TONS, BUILT AT EAST BOSTON IN 1852
Made the passage from New York to San Francisco in 103 days.



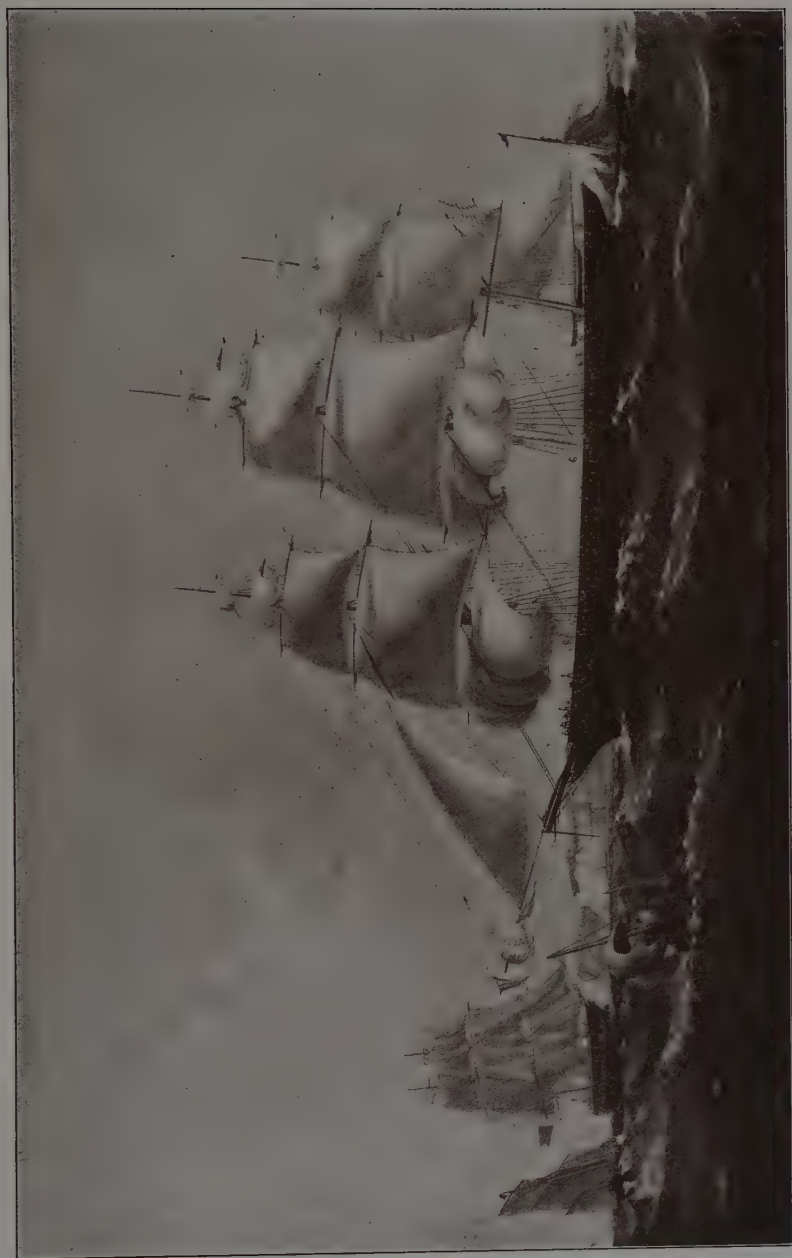
[54] SHIP "STAR OF PEACE" OF BOSTON, 94 TONS, BUILT AT NEWBURYPORT IN 1858
(Captured and burned Mar. 6, 1863 by the Confederate privateer "Florida.")



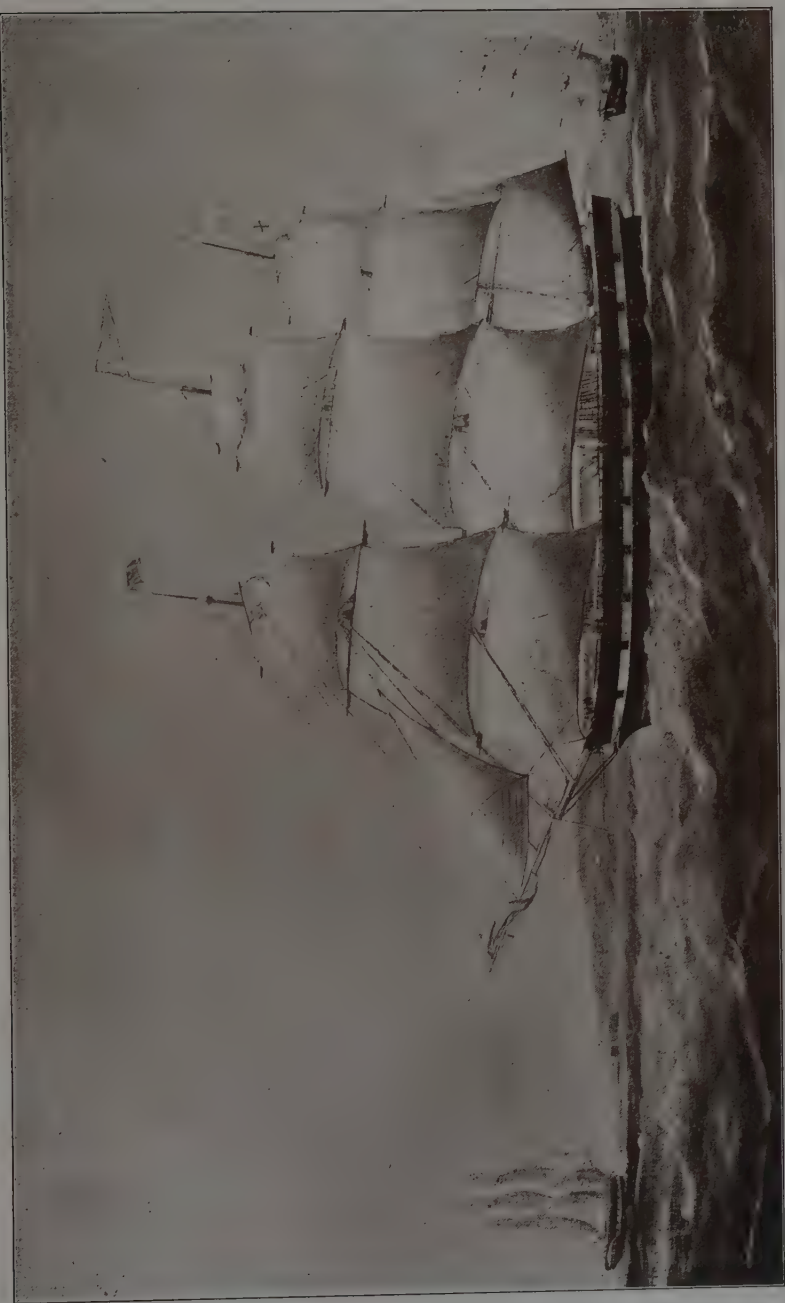
[515] SHIP "SUNBEAM" OF BOSTON, 798 TONS, BUILT AT CHELSEA IN 1865
From an oil painting by Marshall Johnson, showing her on fire at sea.



[516] CLIPPER TOPSAIL SCHOONER "SURPRIZE" CAPTURING THE BRITISH SHIP "STAR", JAN. 27, 1815



[517] CLIPPER SHIP "SURPRISE" OF NEW YORK, 1361 TONS, BUILT AT EAST BOSTON IN 1850



[518] SHIP "SUSAN DREW" OF SALEM, 696 TONS, BUILT AT DUXBURY IN 1839



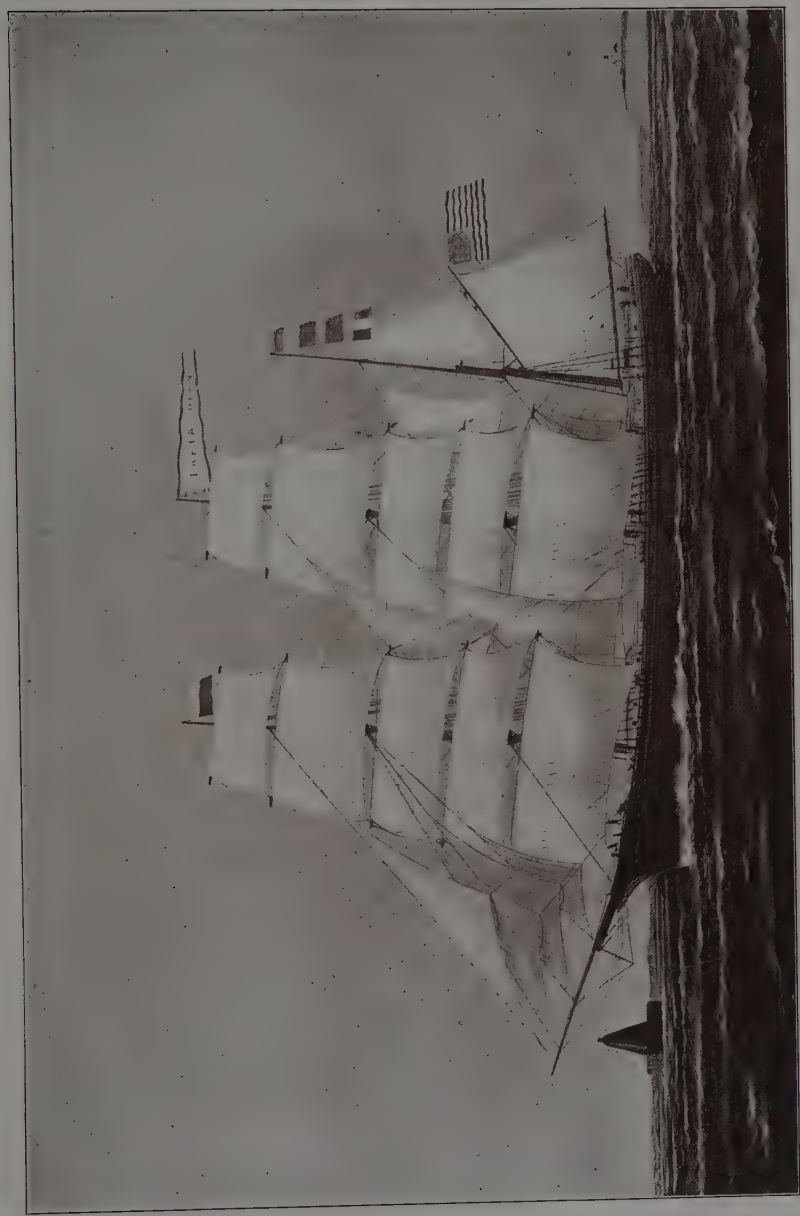
Photograph by George E. Noyes, Newburyport

[519] PILOT BOAT SCHOONER "SYLPH" OF NEW YORK, 70 TONS, BUILT AT BOSTON IN 1834

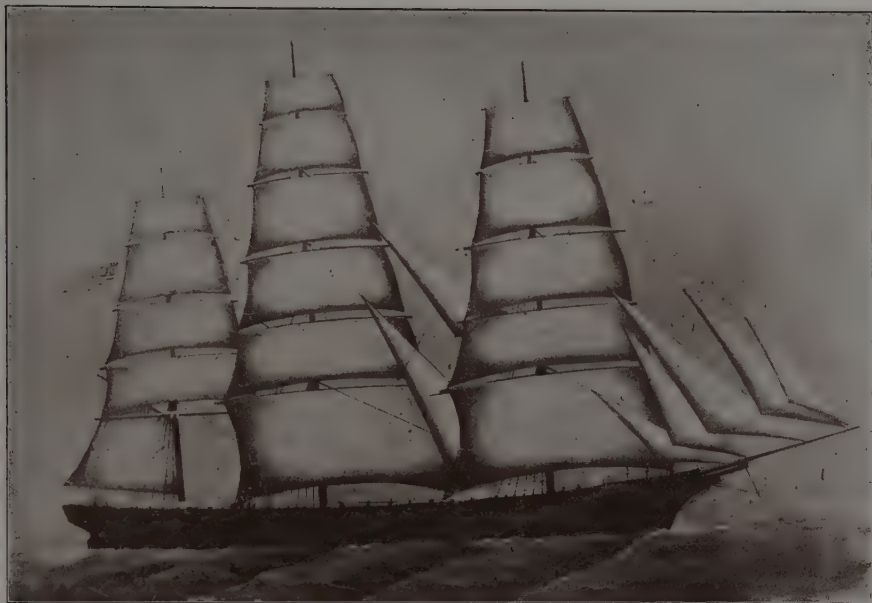


Photograph by George E. Noyes, Newburyport

[520] SHIP "TARQUIN OF BOSTON, 515 TONS, BUILT AT SOUTH BOSTON IN 1853
From a painting showing the vessel lying at Lintin, China.



[521] BARK "TARIA TOPAN" OF SALEM, 631 TONS, BUILT AT SALEM IN 1870
Named for a Zanzibar merchant. From an oil painting by W. P. Stubbs of Boston, 1881.



[522] SHIP "TENNYSON" OF NEWBURYPORT, 1247 TONS, BUILT AT NEW-
BURYPORT IN 1865
Lost at sea Jan. 22, 1873.



[523] SCHOONER "THEOLINE" OF BOSTON, 850 TONS, BUILT AT BELFAST,
MAINE, IN 1905

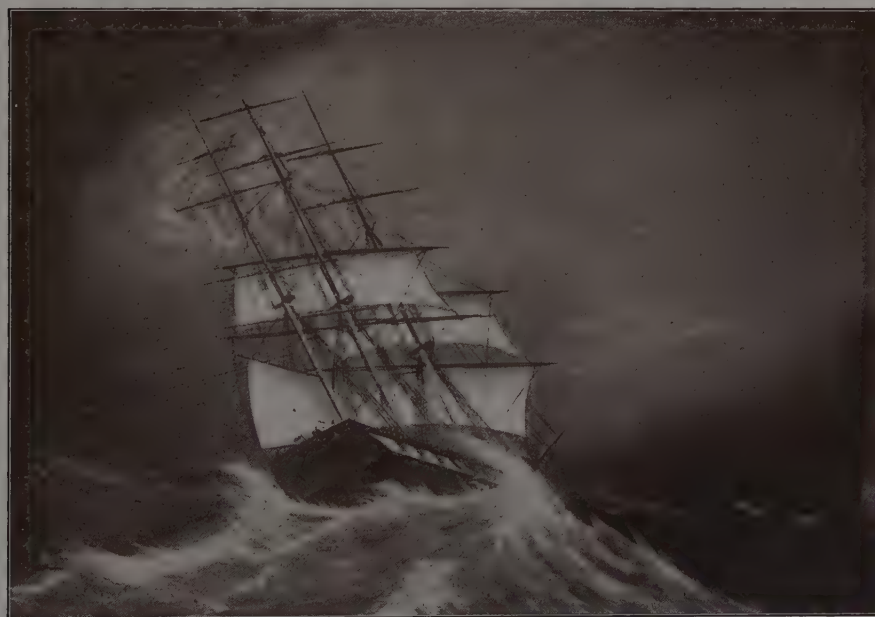


[524] SHIP "TWO BROTHERS" OF SALEM, 288 TONS, BUILT AT SALEM IN 1818
From a watercolor signed—"George Ropes, 1818."



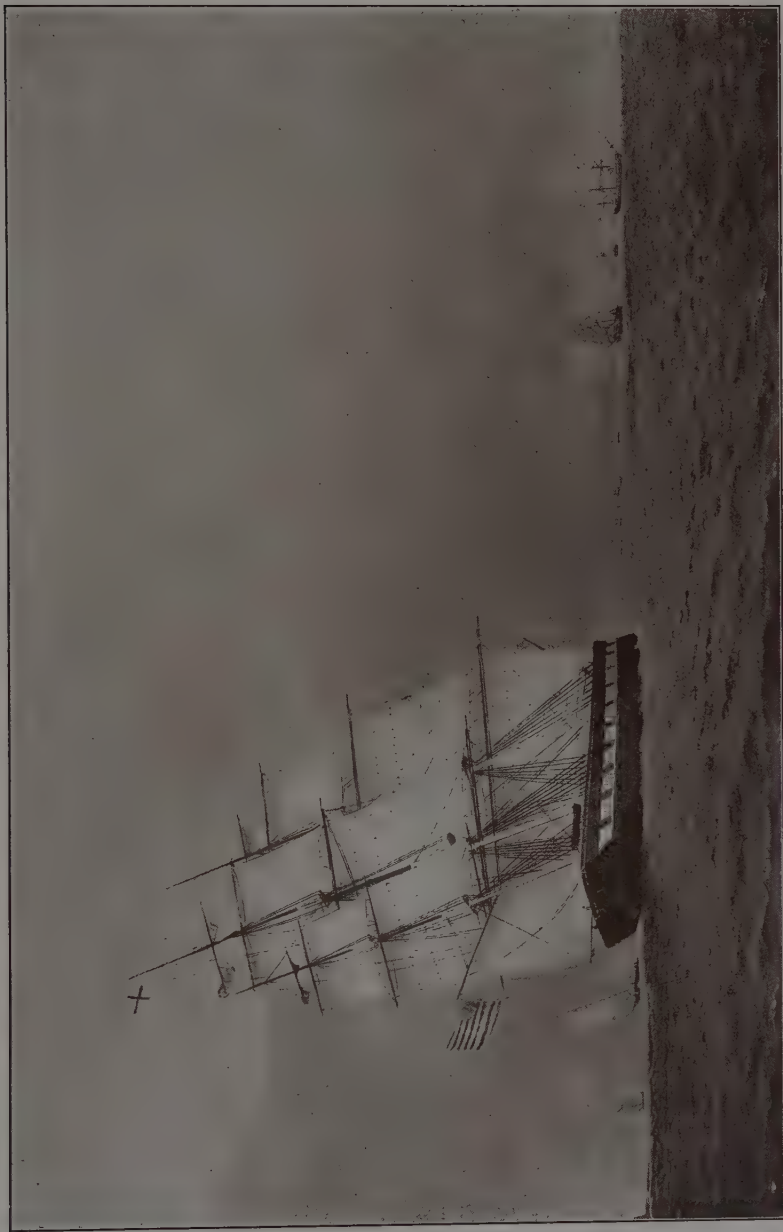
Photograph by George E. Noyes, Newburyport

[525] SHIP "UNION" OF BOSTON, 688 TONS, BUILT AT MEDFORD IN 1850
From a painting showing her in a storm off Minot's Light in 1860.



Photograph by George E. Noyes, Newburyport

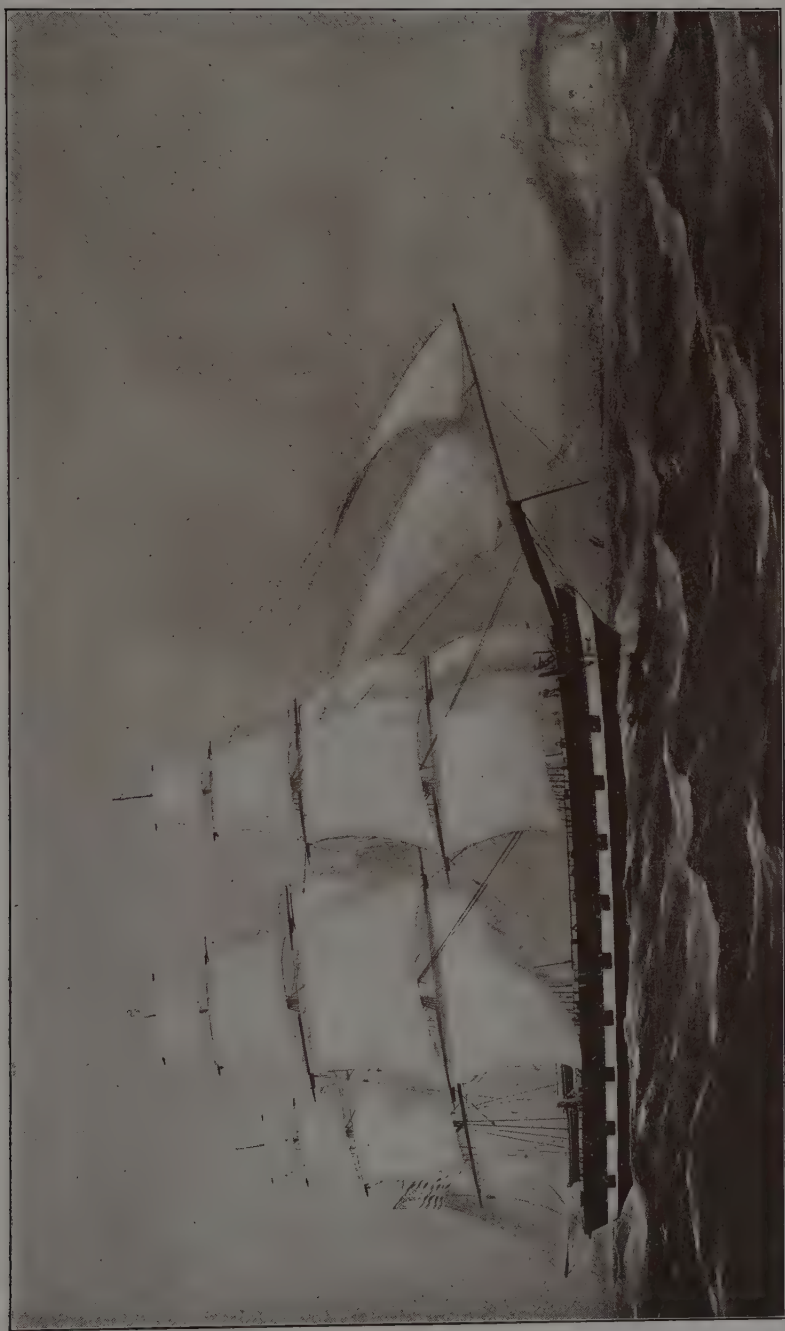
[526] SHIP "UNION" OF BOSTON, 688 TONS, BUILT AT MEDFORD IN 1850
From a painting showing her in a storm off Minot's Light in 1860.



[527] SHIP "UNION" OF BOSTON, 688 TONS, BUILT AT MEDFORD IN 1850



[528] SHIP "UNITED STATES" OF BOSTON, 684 TONS, BUILT AT BATH, ME. IN 1839
After a painting by Robert Salmon.



[529] SHIP "VANCOUVER" OF BATH, ME., 518 TONS, BUILT AT MEDFORD IN 1845

From an oil painting showing the ship off Dover, England.



[530] BRITISH BARK "VERNON" WRECKED ON LYNN (MASS.) BEACH, FEB. 3, 1859 .



Photograph by George E. Noyes, Newburyport

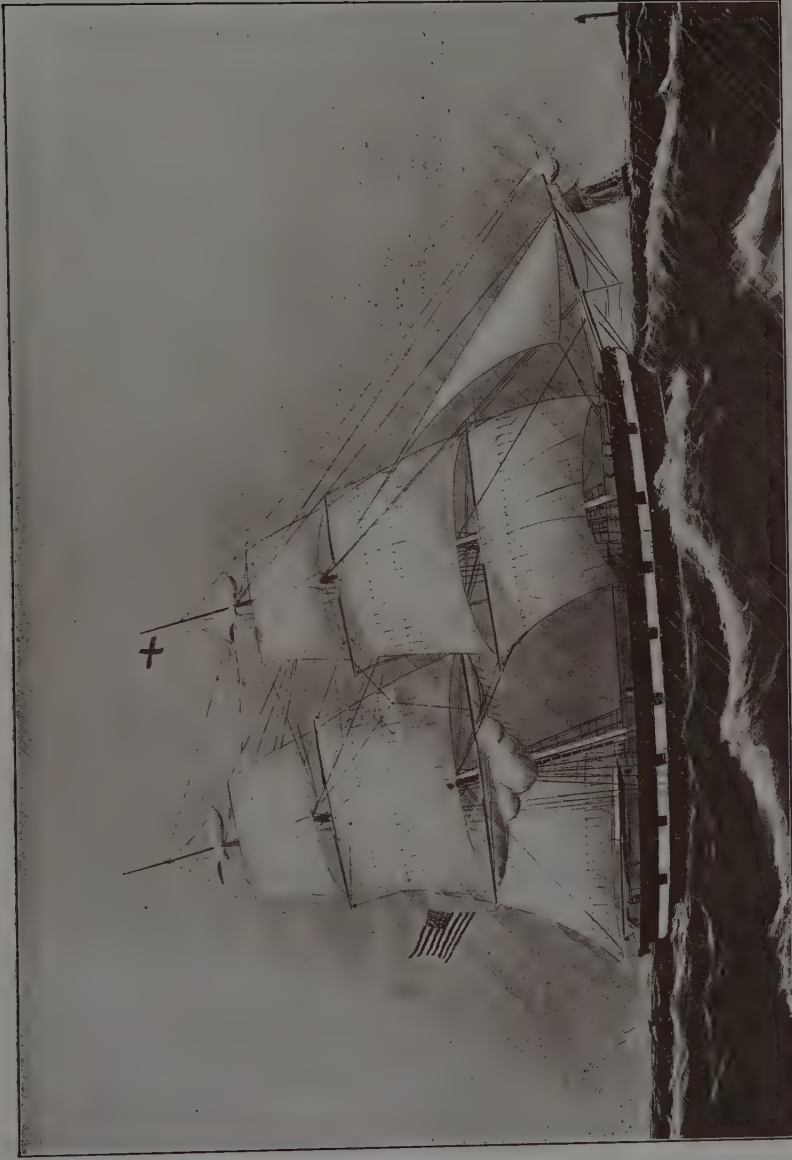
[531] SHIP "VESPER" OF NEWBURYPORT. 321 TONS. BUILT AT NEWBURY-
PORT IN 1827



Photograph by George E. Noyes, Newburyport

[532] SHIP "WALTER SCOTT" OF BOSTON. 1196 TONS. BUILT AT BATH, ME.
IN 1854

Destroyed by fire in Flushing Roads, April 18, 1862. From a painting P. Weytz, Antwerp,
showing the ship passing Flushing in 1860.



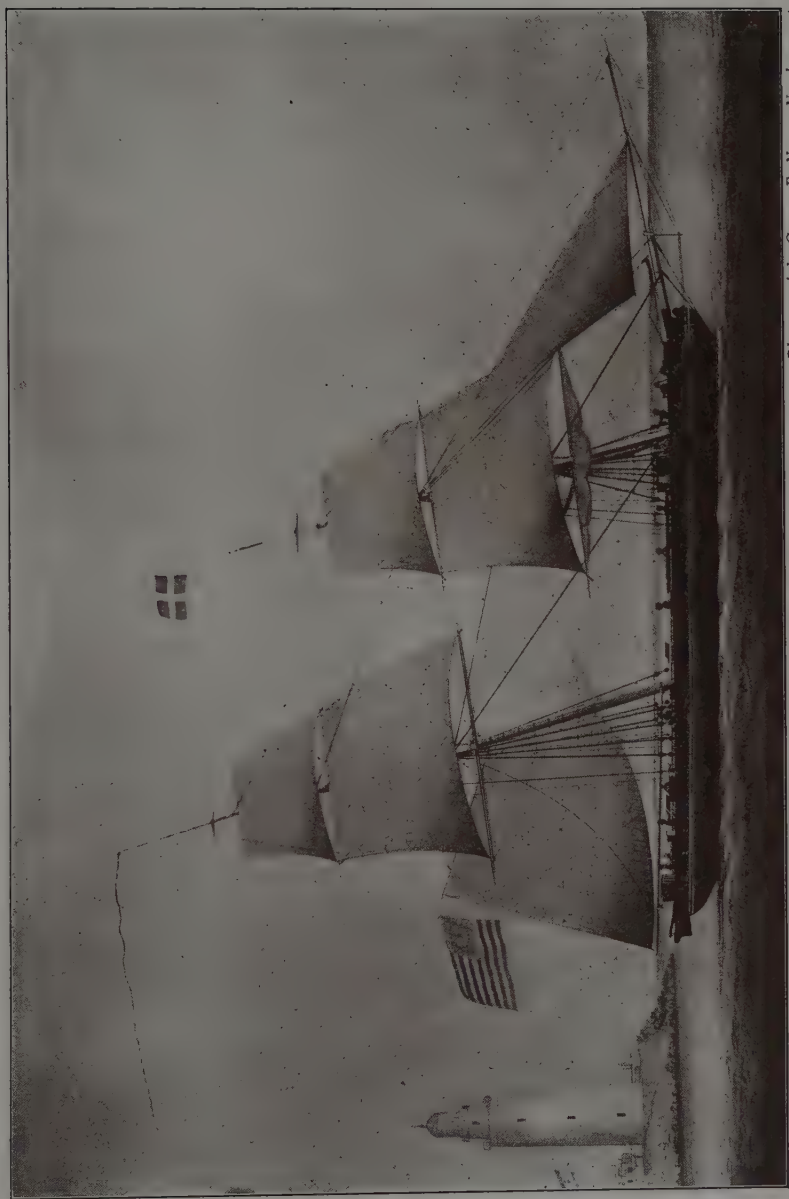
[533] BRIG "VINTAGE" OF SALEM, 250 TONS, BUILT AT SALEM IN 1802
After an oil painting by Clement Drew of Boston.



[534] WHALING SHIP "VIOLA" OF PORTLAND, MAINE, 139 TONS, BUILT AT ESSEX, MASS. IN 1910.

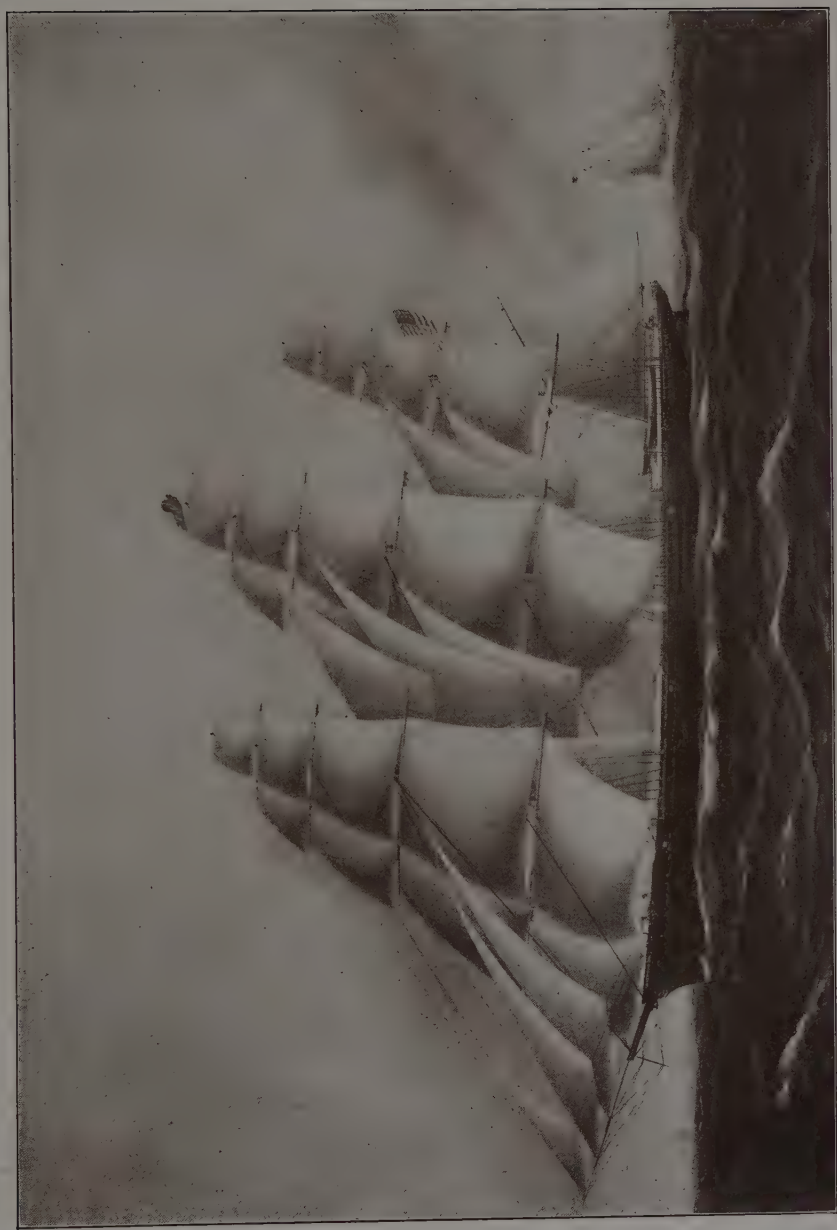


[535] THE DECK OF THE WHALING SHIP "VIOLA", OF PORTLAND, MAINE



Photograph by George E. Noyes, Newburyport

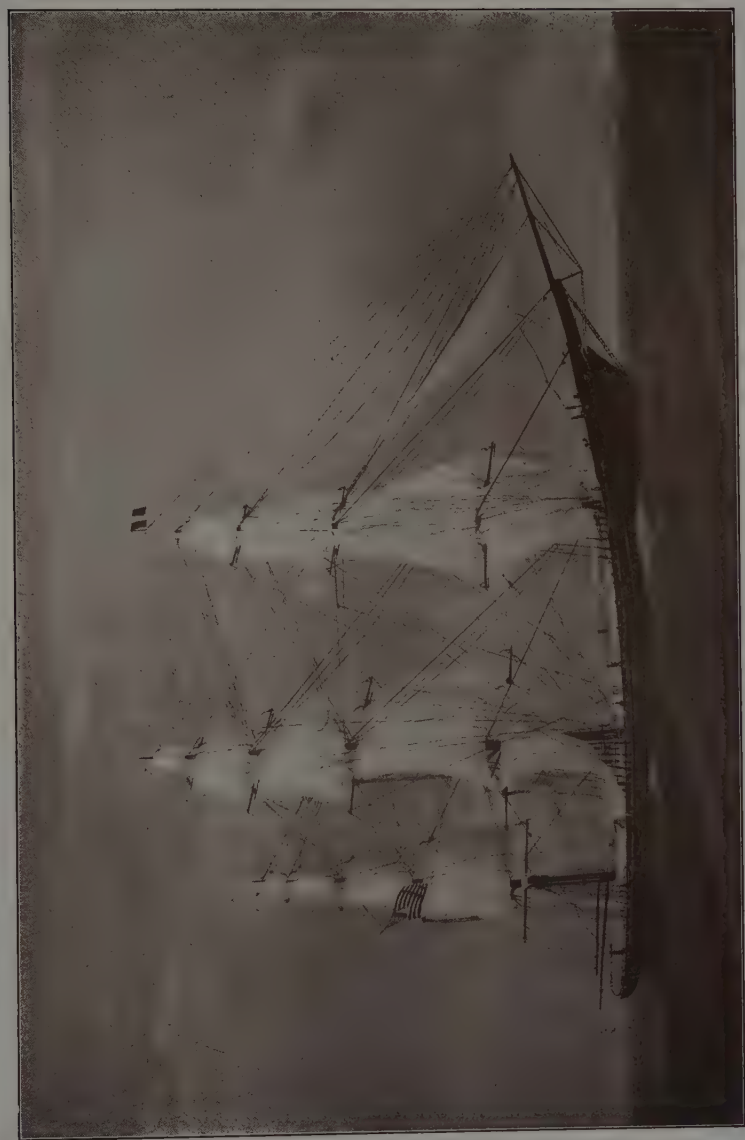
[536] BRIG "WATER WITCH" OF BOSTON, 167 TONS, BUILT AT SCITUATE IN 1831
From a watercolor by Francesco Lengi showing the vessel leaving the Mole of Malaga in 1833.



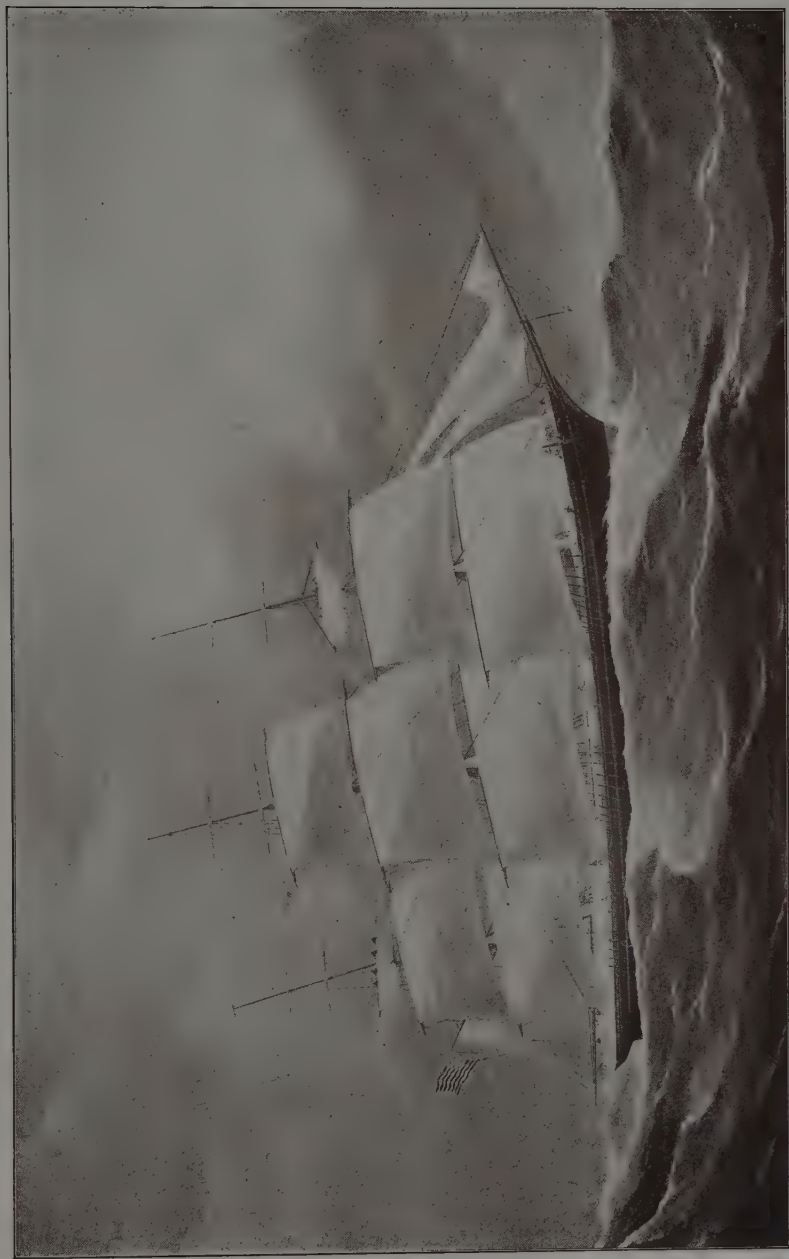
[537] CLIPPER SHIP "WESTWARD HO" OF BOSTON, 1600 TONS, BUILT AT EAST BOSTON IN 1852



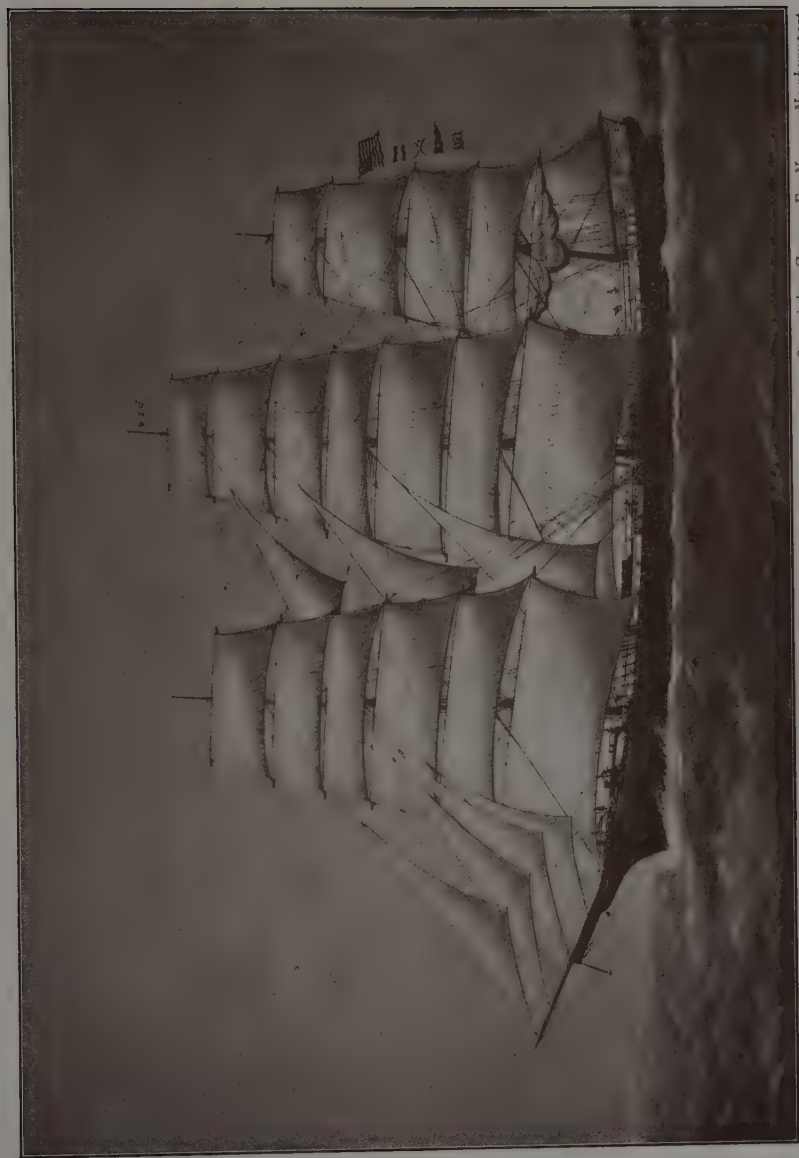
[538] BARK "WHITE CLOUD" OF BOSTON, 396 TONS, BUILT AT WALDOBOROUGH, ME. IN 1854



[539] CLIPPER SHIP "WHITE SWALLOW" OF BOSTON, 1250 TONS, BUILT AT MEDFORD IN 1853
After an oil painting by W. B. Eaton, 1884.



[540] CLIPPER SHIP "WILD RANGER" OF BOSTON, 1044 TONS, BUILT AT MEDFORD IN 1853



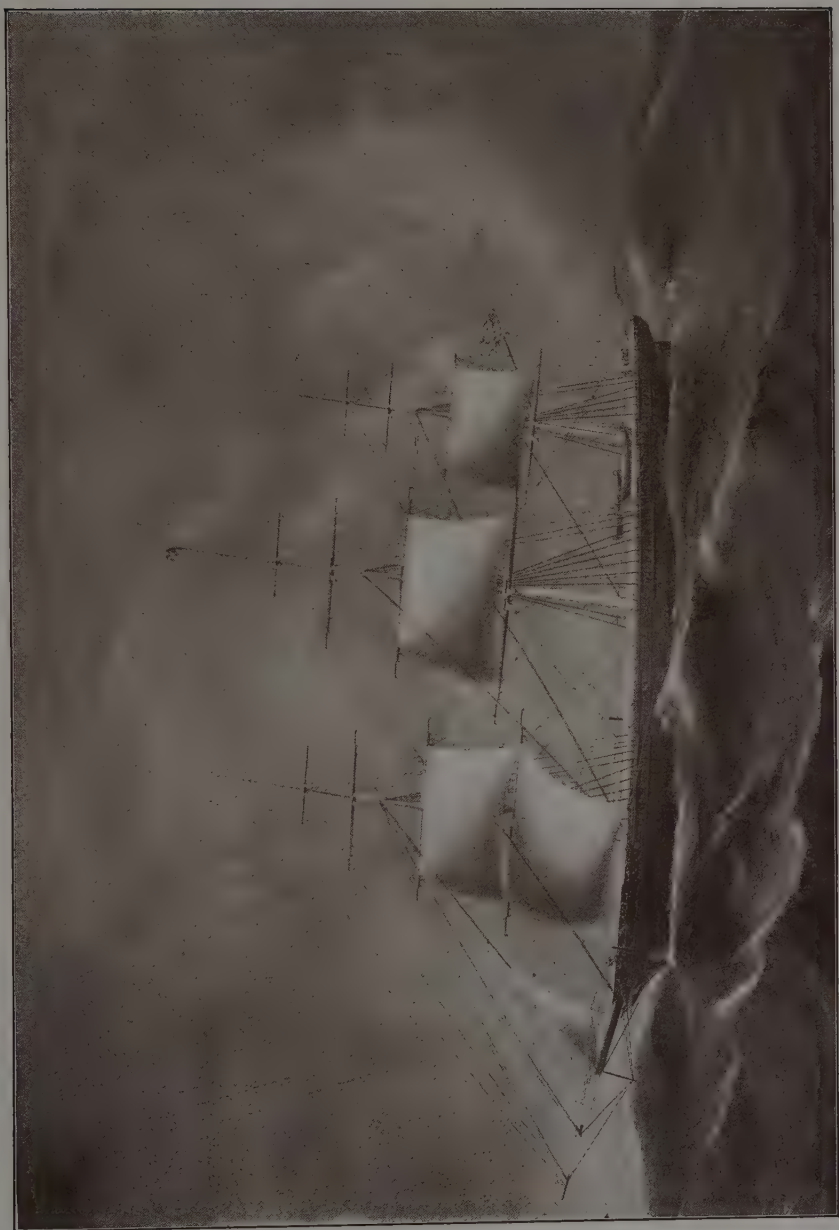
Copyright, George E. Noyes, Newburyport

[541] SHIP "WILLIAM J. ROTCH" OF NEW BEDFORD, 1700 TONS, BUILT AT BATH, ME. IN 1881

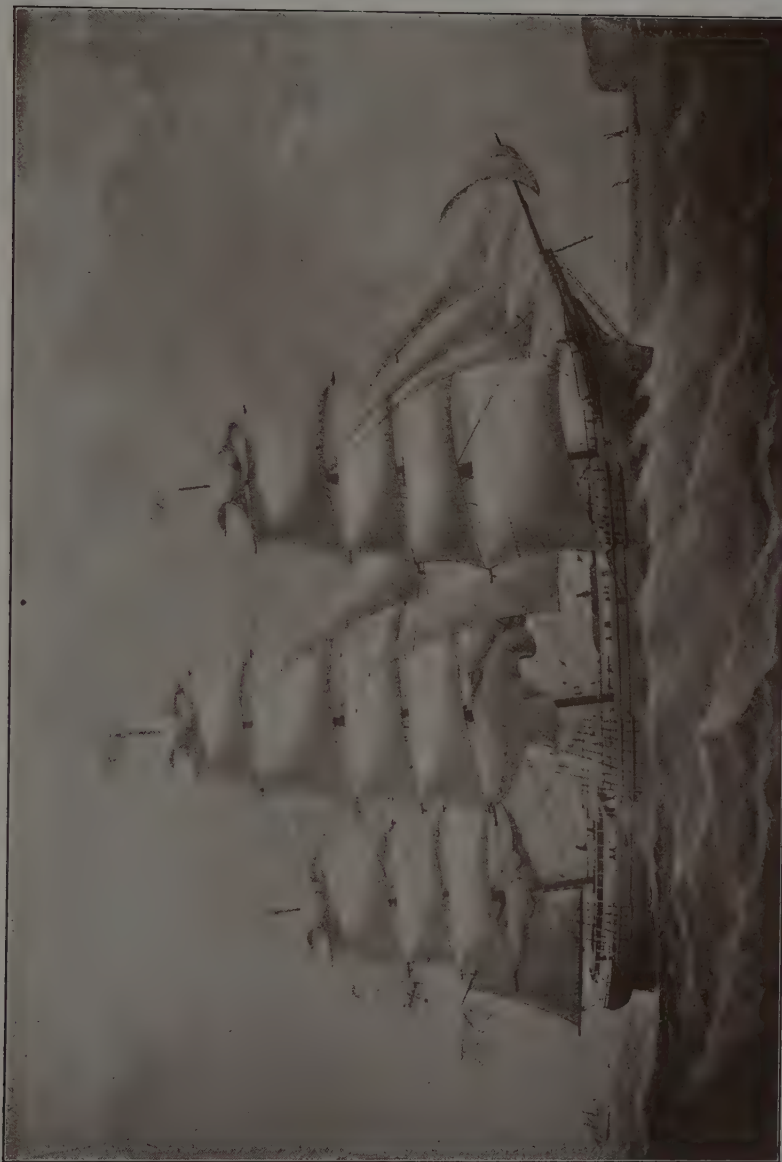
From a painting by Lai Fong made at Calcutta.



[542] CLIPPER SHIP "WINGED HUNTER" OF BOSTON, 1228 TONS, BUILT AT NEWBURYPORT IN 1864



[543] CLIPPER SHIP "WINGED RACER" OF NEW YORK, 1767 TONS, BUILT AT EAST BOSTON IN 1857



Photograph by George E. Noyes, Newburyport

[544] SHIP "WINONA" OF NEWBURYPORT, 1148 TONS, BUILT AT NEWBURYPORT IN 1862
From an oil painting by J. Hughes.



[545] CLIPPER SHIP "WITCH OF THE WAVE" OF BOSTON, 1190 TONS, BUILT AT PORTSMOUTH, N. H. IN 1856



[546] OLD WHALERS LAYING AT A NEW BEDFORD WHARF

Ship "Rousseau", 305 tons, built at Philadelphia in 1801; and Ship "Desdemona", 236 tons, built at Middletown, Conn. in 1823.



[547] TWO OLD WHALERS AT A NEW BEDFORD WHARF: SHIP "ROUSSEAU"
305 TONS, AND SHIP "DESDEMONA", 236 TONS



[548] WHALING SHIP "COMMODORE MORRIS", 355 TONS, DISMANTLED AT A
NEW BEDFORD WHARF



[549] WHALING BARK "JAMES ALLEN" OF NEW BEDFORD, 355 TONS, BUILT AT FAIRHAVEN IN 1844



[550] A WHALING SHIP "HOVE DOWN" AT A NEW BEDFORD WHARF



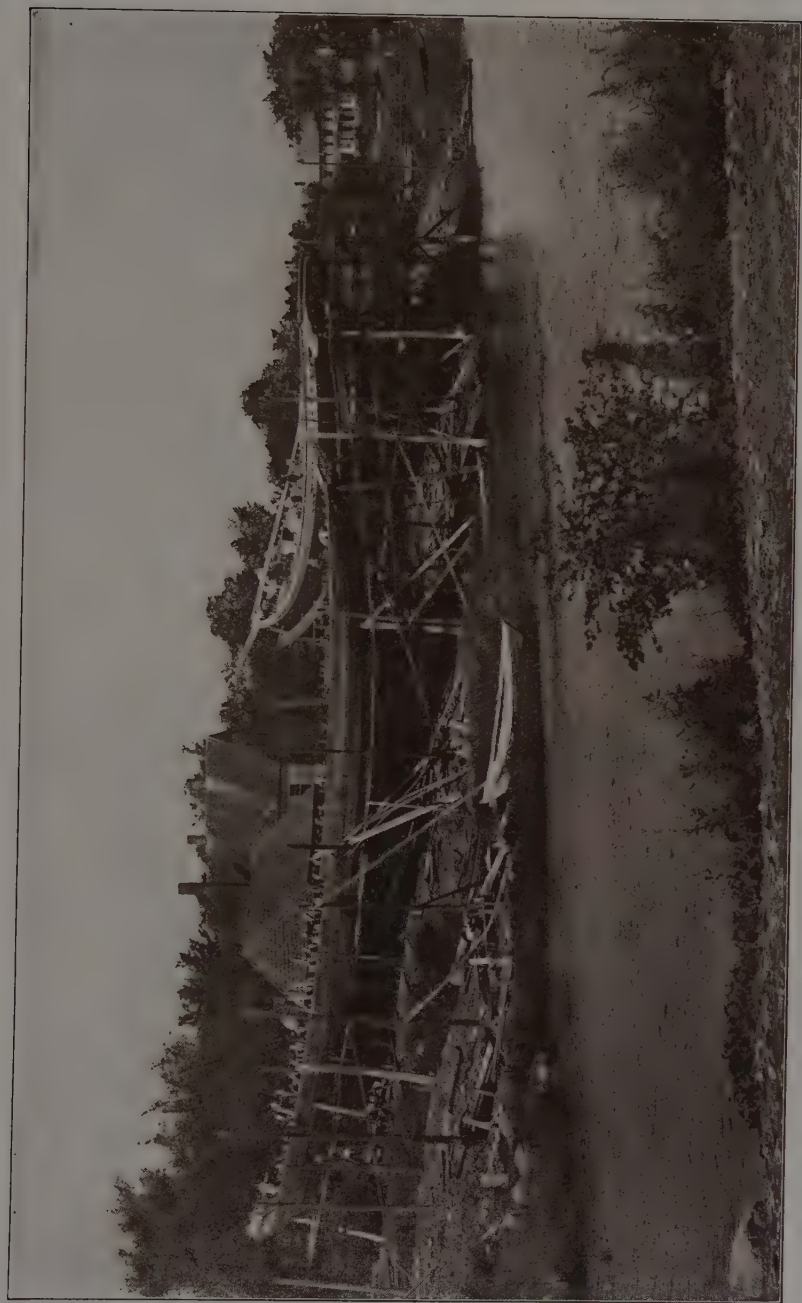
[551] OLD WHALING VESSELS AT A NEW BEDFORD WHARF IN 1880
From left to right:—schooner. "Antarctic" barks, "Swallow," "Desdemona," "Rousseau," and "Jirch Perry."



[552] WHALING BARKS DRYING THEIR SAILS AT A NEW BEDFORD WHARF



[553] A WHALER "HOVE DOWN" AT A NEW BEDFORD WHARF IN 1882



[554] THE A. D. STORY SHIP YARD AT ESSEX, MASSACHUSETTS, IN 1908

